

## **3.2 Conservation and Coastal Management**

### **GOAL 201**

Air quality in Monroe County shall be maintained at existing high levels such that it continues to meet all attainment standards set by the State of Florida and the U.S. Environmental Protection Agency (EPA). [9J-5.013(2)(a)]

#### **Objective 201.1**

Monroe County shall continue to maintain existing ambient air quality levels in compliance with the National Ambient Air Quality Standards (NAAQS). [9J-5.013(2)(b)1]

##### **Policy 201.1.1**

By September 30th of each year, Monroe County, in coordination with local DER representatives, shall review the annual air quality monitoring data for Monroe County. Any violations of the NAAQS or trends in ambient air quality shall be reported to the BOCC. [9J-5.013(2)(b)1]

##### **Policy 201.1.2**

Applicable DER and EPA permits for required pollution control devices shall be obtained prior to receiving a Monroe County building permit for all proposed projects. [9J-5.013(2)(b)1]

##### **Policy 201.1.3**

Development Orders shall require that land areas exposed during construction be treated with mulch, spray, grass or other appropriate methods in order to minimize air pollution. [9J-5.013(2)(b)1]

##### **Policy 201.1.4**

All mining activities shall comply with DER standards designed to reduce point sources of air pollution. [9J-5.013(2)(b)1]

##### **Policy 201.1.5**

Monroe County shall support state government programs for the inspection and maintenance of automobile emission control systems. [9J-5.013(2)(b)1]

##### **Policy 201.1.6**

Monroe County shall support state government programs to regulate petroleum and gasoline storage facilities with an emphasis on controlling VOC emissions. [9J-5.013(2)(b)1]

### **GOAL 202**

The environmental quality of Monroe County's estuaries, nearshore waters (canals, harbors, bays, lakes and tidal streams,) and associated marine resources shall be maintained and, where possible, enhanced. [9J-5.012(3)(a); 9J-5.013(2)(a)]

### **Objective 202.1**

Monroe County shall work cooperatively with the U.S. Environmental Protection Agency (EPA), the Florida Department of Environmental Regulation (DER), the South Florida Water Management District (SFWMD), and the National Oceanic and Atmospheric Administration (NOAA) to develop and implement the Water Quality Protection Program for the Florida Keys National Marine Sanctuary. Pursuant to the Florida Keys National Marine Sanctuary Act (H.R. 5909), this program shall be enacted no later than July/August 1993. [9J-5.012(3)(b)2; 9J-5.013(2)(b)2]

#### **Policy 202.1.1**

Monroe County shall coordinate with EPA, DER, SFWMD and NOAA to determine the scope of studies required to document pollutant loads for Florida Keys waters.

Phase I of the Development Plan for the Florida Keys National Marine Sanctuary Water Quality Protection Program (EPA and DER, in preparation), recommends several studies be undertaken in order to:

1. provide data to document relationships between water quality and declines in seagrass beds and coral communities; and
2. to provide the basis for institutional and regulatory changes which will protect against further declines in the quality of confined and nearshore waters and their biotic communities.

Recommended studies include the following:

1. monitoring to characterize the nutrient inputs to groundwater;
2. data collection and modeling in order to understand the transportation of groundwater nutrients to marine coastal waters;
3. monitoring to characterize the constituents within stormwater based on use, as well as determination of what percentage of stormwater results in overland flow to marine coastal waters;
4. data collection pertaining to natural nutrient regeneration due to decomposition of floating Sargassum and seagrass within confined water bodies;
5. evaluation of the relative contributions of point source discharges, groundwater input, stormwater overland flow, natural decomposition of organic matter, and other mechanisms of nutrient input and potential for further declines in water quality within the confined waters of the Florida Keys National Marine Sanctuary;
6. monitoring of water, sediment and biotic parameters for confined and nearshore waters; and

7. development of potential engineering solutions applicable to the Florida Keys, with cost estimates, for selected representative areas of confined waters that are experiencing poor water quality.

By January 4, 1997, Monroe County shall seek to enter into an agreement with the EPA, DER, SFWMD, and NOAA which shall describe the responsibilities of each agency and of the County in each of these studies. Monroe County shall:

1. obtain and/or make available the necessary funds to complete the study tasks for which it is responsible; and
2. execute those tasks in accordance with the timeframes outlined by the agreement.

Special studies to be undertaken by Monroe County as identified in other elements of the Monroe County Year 2010 Comprehensive Plan shall be coordinated with these special studies. Specifically:

1. the scope of work for the Sanitary Wastewater Master Plan shall be developed so as to include special studies required to assess pollutant loadings to ground and nearshore waters from sanitary wastewater facilities (see Objective 901.4 and related policies);
2. the scope of work for the Stormwater Management Master Plan shall be developed so as to include special studies required to assess:
  - a) non-point source contributions to surface water discharges from stormwater; and
  - b) non-point source contributions to groundwater from stormwater (see Drainage Element Objective 1001.3 and related policies); and
3. the scope of the Live-Aboard Study shall be developed so as to collect data required to determine pollutant loadings from live-aboard vessels (see Policy 202.4.2). [9J-5.012(3)(c)1,3 and 13; 9J-5.013(2)(c)1]

#### **Policy 202.1.2**

Monroe County shall coordinate with EPA, DER, SFWMD and NOAA during completion of Phase II of the Florida Keys National Marine Sanctuary Water Quality Protection Program. Pursuant to the Florida Keys National Marine Sanctuary Act (H.R. 5909), Phase II shall:

1. adopt or revise, under applicable Federal and State laws, applicable water quality standards for the Sanctuary;
2. adopt enforceable pollution control measures (including water quality-based effluent limitations and best management practices) and methods to eliminate or reduce pollution from point and nonpoint sources; and
3. establish a comprehensive water quality monitoring program to:

- a) determine the sources of pollution causing or contributing to existing or anticipated pollution problems in the Sanctuary;
- b) evaluate the effectiveness of efforts to reduce or eliminate those sources of pollution; and
- c) evaluate progress toward achieving and maintaining water quality standards and toward protecting and restoring the coral reefs and other living marine resources of the Sanctuary. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.1.3**

Within six months following completion of the Water Quality Protection Program by DER, Monroe County shall:

- 1. review the County's policies and regulations pertaining to water quality protection; and
- 2. shall draft and complete revisions, as appropriate, to the County's policies and regulations, including the Land Development Regulations and other sections of the Monroe County Code, as appropriate, to comply with the requirements and intent of the Water Quality Protection Program. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.1.4**

Within six months following completion of the Water Quality Protection Program by DER, Monroe County shall seek to enter into an agreement with EPA, DER, SFWMD and NOAA which shall describe the responsibilities of each agency and of the County in the water quality monitoring program. Monroe County shall:

- 1. obtain and/or make available the necessary funds to complete the monitoring program tasks for which it is responsible; and
- 2. execute those tasks in accordance with the timeframes outlined by the agreement. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.1.5**

Monroe County shall continue to maintain the Monroe County Department of Marine Resources with adequate staff and funding to support the development and implementation of the Florida Keys National Marine Sanctuary Management Plan, including the Water Quality Protection Program. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Objective 202.2**

Monroe County shall develop and implement permitting, inspection, and enforcement procedures designed to reduce pollutant discharges into ground and surface waters from on-site disposal systems. (See Goal 901 and related objectives and policies.) [9J-5.012(3)(b)2; 9J-5.013(2)(b)2]

**Objective 202.3**

Monroe County shall develop and implement permitting, inspection, and enforcement procedures designed to reduce pollutant discharges into ground and surface waters from wastewater treatment plants. (See Goal 901 and related objectives and policies.) [9J-5.012(3)(b)2; 9J-5.013(2)(b)2]

**Objective 202.4**

By January 4, 1998, Monroe County shall develop and implement siting and discharge regulations, fee requirements, and enforcement provisions designed to reduce pollutant discharges into surface waters from moored/anchored vessels (live-aboards) in nearshore waters to the extent allowed by law. [9J-5.012(3)(b)2; 9J-5.013(2)(b)2]

**Policy 202.4.1**

By January 4, 1997, Monroe County shall adopt revisions to the Monroe County Code pertaining to live-aboard vessels which:

1. adopt existing federal regulations for required marine sanitation;
2. define the term "live-aboard vessel" in terms of type and duration of vessel use (to be consistent with or more strict than pending DNR rule defining "live-aboard vessel");
3. prohibit living on board vessels of any type in residential districts;
4. require non-conforming live-aboard vessels in use as of January 4, 1997, to comply with all applicable regulations on or before January 4, 1998;
5. require that new marinas at which a live-aboard vessel is proposed to be docked provide a pump-out station;
6. require all marinas, regardless of size, to provide signage conspicuously posted at dockage sites which educate the live-aboard public about the importance of pumping out and which give clear directions to the nearest pump-out stations;
7. prohibit construction of docks which permit commercial docking of boats with on-board toilets unless the dock facility is equipped with a sewage pump-out; and
8. prohibit construction of docks which permit docking of a live-aboard vessel unless such vessel has an operable holding tank. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6].

**Policy 202.4.2**

By January 4, 1998, Monroe County, with the assistance of the Marine and Port Authority Committee, shall present a report to the BOCC concerning live-aboard vessels. This report shall:

1. recommend criteria for siting live-aboard mooring areas;

2. identify potential locations of live-aboard mooring areas;
3. identify live-aboard sanitation requirements;
4. identify maximum vessel allowances in live-aboard mooring areas
5. identify methods for registration and fee collection;
6. propose definitions for live-aboard status;
7. identify pollutant loadings from live-aboards;
8. identify needs for public pump-out facilities; and
9. determine the extent of local government jurisdiction pertaining to the use of waters of the Florida Keys. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.4.3**

Development of the management recommendations for live-aboard vessels shall be coordinated with NOAA to ensure consistency with recommendations of the Florida Keys National Marine Sanctuary Management Plan. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.4.4**

By January 4, 1998, Monroe County shall adopt revisions to the Monroe County Code pertaining to liveaboard vessels which establish the following:

1. live-aboard vessel siting criteria;
2. maximum vessel allowances;
3. no discharge zones within harbors and near-shore waters;
4. sanitation requirements;
5. requirements for live-aboard provisions (such as parking and solid waste disposal);
6. establishes a registration and fee structure for live-aboard moorings (to offset costs of mooring buoys, enforcement efforts and public pump-outs);
7. concurrency provisions, and
8. impact fee provisions. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.4.5**

By January 4, 1998, Monroe County shall adopt a plan for providing public pump-out facilities in county-owned locations. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Objective 202.5**

Monroe County shall develop and implement permitting, inspection, and enforcement procedures designed to reduce pollutant discharges into surface waters from marinas and fueling facilities. [9J-5.012(3)(b)2; 9J-5.013(2)(b)2]

**Policy 202.5.1**

By January 4, 1997, Monroe County shall adopt revisions to the Land Development Regulations requiring new marinas having ten (10) or more slips (wet or dry), or at which a live-aboard vessel is proposed to be docked, to provide an on-site pump-out station and appropriate sewage treatment to accommodate the number of slips present according to DER and HRS standards. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.5.2**

By January 4, 1997, Monroe County shall adopt revisions to the Land Development Regulations requiring existing marinas making application for site improvements to provide a plan for retrofitting existing facilities to include an on-site pump-out station and sewage treatment. This requirement shall apply to all marinas having ten (10) or more slips (wet or dry), or at which a live-aboard vessel is docked. Implementation of this plan shall be a condition of permit issuance for site improvements at existing marinas. The plan shall be fully implemented within one year of permit issuance. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.5.3**

Existing marinas having ten (10) or more slips (wet or dry), or at which a live-aboard vessel is docked, which have not been retrofitted by January 4, 1998, shall submit a plan to Monroe County for retrofitting existing facilities to include an on-site pump-out station and sewage treatment. This plan shall be submitted by January 5, 1998, and shall be fully implemented by January 4, 1999.

Existing marinas subject to the retrofitting requirement shall be identified through the Marina Survey (see Policy 212.4.2). The County shall notify owners of compliance requirements in writing by January 4, 1997. [9J-5.012(3) (c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.5.4**

By January 4, 1998, Monroe County shall require an annual operating permit for all marinas having ten (10) or more slips (wet or dry) or at which a live-aboard vessel is docked. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.5.5**

By January 4, 1998, Monroe County shall develop and implement an enforcement program designed to ensure compliance with existing state and federal regulations pertaining to adequate spillage prevention, containment, and clean-up of fuel or hazardous material at marina sites and fueling facilities. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Objective 202.6**

By January 4, 1997, Monroe County shall take actions to support and promote enforcement of wastewater discharge permits for seafood processing facilities and other industrial dischargers. [9J-5.012(3)(b)2; 9J-5.013(2)(b)2]

**Policy 202.6.1**

Monroe County shall request that the DER pursue alternatives to surface water discharges for all industrial discharges not already discharging to bore holes. Particular attention should be directed to finding suitable alternatives to surface water discharge for seafood processing facilities.

For those permittees where bore hole disposal is determined preferable, then the permit conditions should be amended to require timely transfer to bore hole disposal. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.6.2**

Monroe County shall request that the DER require wastewater discharge permits for all seafood processing facilities in the Florida Keys. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.6.3**

Monroe County shall adopt revisions to the Monroe County Code pertaining to the disposal of fish and shellfish by-products from seafood processing facilities, including the following:

1. by-products shall not be dumped into surface waters or wastewater disposal systems;
2. by-products shall be disposed of as solid waste; and
3. consideration shall be given to suitable reuse of by-products. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Objective 202.7**

By January 4, 1998, Monroe County shall develop and implement a boating impacts management program designed to reduce adverse impacts on water quality and living marine resources associated with recreational boating. (See Objective 203.5 and related policies.) [9J-5.012(3)(b)2; 9J-5.013(2)(b)2]

**Objective 202.8**

By January 4, 1997, Monroe County shall adopt Land Development Regulations which implement county policies controlling pollutant discharges into surface waters from dredge and fill activities. [9J-5.012(3)(b)2; 9J-5.013(2)(b)2]

**Policy 202.8.1**

Monroe County shall support state and federal policies and regulations concerning the permitting of dredge and fill activity, except in those instances where more stringent



regulations adopted by Monroe County shall be maintained. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.8.2**

No new dredging shall be permitted in Monroe County. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.8.3**

No maintenance dredging shall be permitted within areas vegetated with seagrass beds or characterized by hardbottom communities except for maintenance in public navigation channels. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.8.4**

In order to facilitate establishment of bottom vegetation, maintenance dredging in artificial waterways shall not exceed depths greater than minus six (-6) feet mean low water. This policy does not apply to the entrance channels into Key West Harbor and Safe Harbor. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.8.5**

All dredged spoil resulting from maintenance dredging shall be placed on permitted upland sites where drainage can be contained on-site. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.8.6**

No "after-the-fact" permits shall be issued that violate Monroe County dredge and fill regulations. All illegal structures and fill shall be removed and damages mitigated. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.8.7**

Monroe County shall develop a schedule of monetary penalties that provides for fair and equitable penalties for all dredge and fill violations. Penalty revenues obtained from these violations shall be set aside and used specifically for water quality enhancement projects. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Objective 202.9**

By January 4, 1997, Monroe County shall develop and implement permitting, inspection, and enforcement procedures designed to reduce pollutant discharges into ground and surface waters from stormwater runoff. (See Drainage Goal 1001 and related objectives and policies.) [9J-5.012(3)(b)2; 9J-5.013(2)(b)2]

**Objective 202.10**

By January 4, 1997, Monroe County shall develop and initiate implementation of a soil erosion and sedimentation control program. This program shall be designed to reduce pollutant discharges into surface waters due to soil erosion and sedimentation. [9J-5.012(3)(b)2; 9J-5.013(2)(b)2 and 3]

**Policy 202.10.1**

Monroe County, in consultation with the Soil Conservation Service (SCS) District Conservationist for Dade-Monroe Counties, shall identify the technical assistance available from the SCS for development and implementation of a soil erosion and sedimentation control program for Monroe County. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.10.2**

Monroe County, in coordination with SFWMD, DER, FDOT and SCS, shall develop and adopt best management practices for temporary and permanent erosion and sedimentation control practices for construction and other non-agricultural land disturbing activities in the Florida Keys. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.10.3**

By January 4, 1997, Monroe County shall adopt a Stormwater Management Ordinance which adopts the level of service standards for the quality and quantity of stormwater discharges in this Comprehensive Plan (see Drainage Policy 1101.1.1). Best management practices (BMPs) developed pursuant to Policy 202.10.2 above for temporary and permanent erosion and sedimentation control shall be incorporated by reference into this ordinance and shall be recommended for use to meet water quality criteria of the ordinance. At a minimum, BMPs shall include minimizing alteration of the natural landscape due to paving and elevational changes and the use of retention basins, detention basins, vegetated swales, and/or exfiltration trenches on site, as appropriate.

**Policy 202.10.4**

Monroe County shall require use of the adopted best management practices for erosion and sedimentation control, where appropriate, as stipulations for land development orders. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.10.5**

Monroe County shall identify erosion and sedimentation problem areas within existing subdivisions and disturbed or scarified lands. The Stormwater Management Master Plan will address drainage improvements required for these areas to mitigate erosion and sedimentation problems (see Drainage Objective 1001.3 and related policies). [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.10.6**

By January 4, 1997, Monroe County shall adopt revisions to the Land Development Regulations pertaining to shoreline stabilization (see Objective 212.6 and related policies.) [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.10.7**

Monroe County shall identify shoreline areas on public and private lands where there is evidence of serious shoreline erosion and shall assess options for shoreline stabilization. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.10.8**

All mining activities shall be conducted in accordance with sedimentation and erosion control plans (see Policies 208.2.2 and 208.2.7.). [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Objective 202.11**

By January 4, 1998, Monroe County shall immediately take actions to promote mosquito control techniques which will reduce the entry of pollutants from aerial pesticide applications into ground and surface waters. [9J-5.012(3)(b)2; 9J-5.013(2)(b)2]

**Policy 202.11.1**

Monroe County shall coordinate with the Monroe County Mosquito Control Board, the EPA and the FKNMS to review:

1. application guidelines for aerial pesticide spraying; and
2. alternatives to aerial applications of pesticide.

**Policy 202.11.2**

Monroe County shall request that the state undertake a state-wide research and development program for alternatives to aerial applications of pesticides for mosquito control. This program should emphasize ground controls, including biological controls. It should be conducted through existing mosquito control districts and independent researchers, in cooperation with EPA and the Florida Keys National Marine Sanctuary. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.11.3**

Until alternatives can be identified, Monroe County, in coordination with the Monroe County Mosquito Control Board, shall develop and implement a plan for spraying which will minimize the impact on marine resources and human health by avoiding marine waters and the property of owners who have requested no spray. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Objective 202.12**

The Monroe County HRS Unit shall continue to undertake activities designed to reduce pollutant discharges into ground and surface waters from aboveground and underground storage tanks. [9J-5.012(3)(b)2; 9J-5.013(2)(b)2]

**Policy 202.12.1**

The Monroe County HRS Unit shall perform compliance and enforcement activities pertaining to storage tanks regulated by DER under Chapter 17-761, F.A.C (underground storage tanks) and Chapter 17-762, F.A.C. (aboveground storage tanks). This activity shall be undertaken under the terms of the Compliance Verification Contract between DER and the Monroe County HRS Unit. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.12.2**

The Monroe County HRS Unit shall seek to expand its storage tank program such that all storage tank facilities in the Keys comply with state and federal financial responsibility requirements or participate in the optional Florida Petroleum Liability Insurance and Restoration Program. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.12.3**

By January 4, 1998, Monroe County shall establish a requirement by development regulations that all new and replacement petroleum and gasoline storage facilities be double walled.

**Objective 202.13**

Monroe County shall undertake activities which support existing state and federal laws pertaining to the handling, transportation and disposal of hazardous wastes. (See Solid Waste Objective 801.5 and related policies.) [9J-5.012(3)(b)2; 9J-5.013(2)(b)2 and 10]

**Objective 202.14**

By January 4, 1998, Monroe County shall make a determination as to the appropriate use of aerators, backfilling, the opening of dead end canals, and the utilization of weed restriction devices as a means of improving water quality in canal systems and shall request, if appropriate, a special rule for the Florida Keys pertaining to the use of same. [9J-5.012(3)(b)1,2 and 3; 9J-5.013(2)(b)2]

**Policy 202.14.1**

Monroe County shall work cooperatively with DER and the ACOE to identify the water quality and permitting issues related to the use of aerators, backfilling, the opening of dead end canals, and utilization of weed restriction devices in canal systems. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.14.2**

Monroe County shall support an independent research study through a university or other impartial research foundation designed to determine the possible applications and impacts of aeration, backfilling, the opening of dead end canals, and utilization of weed restriction devices in canal systems in the Florida Keys. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.14.3**

Monroe County shall, if deemed appropriate after study of water quality issues, request consideration of a special rule for the Florida Keys pertaining to the use of aerators, backfilling, the opening of dead end canals, and utilization of weed restriction devices in canal systems. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Objective 202.15**

By January 4, 1998, Monroe County shall make a determination as to the water quality impacts associated with unplugging residential canals and shall request, if appropriate, a special rule for the Florida Keys pertaining to opening of canal plugs. [9J-5.012(3)(b)1,2 and 3; 9J-5.013(2)(b)2]

**Policy 202.15.1**

Monroe County shall work cooperatively with DER and the ACOE to identify the water quality and permitting issues related to the unplugging of residential canals. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 202.15.2**

Monroe County shall, if deemed appropriate after study of water quality issues, request consideration of a special rule for the Florida Keys pertaining to the opening of plugged, residential canals. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Objective 202.16**

By January 4, 1998, Monroe County shall implement an ongoing coordination program with other local governments and with state and federal agencies to address existing and regional water management practices on the Florida mainland which may affect:

1. the conservation, use and protection of water quality, marine benthic communities, and fisheries in Florida Bay; and
2. the wetlands, unique vegetative communities, and species of special status on mainland Monroe County. [9J-5.012(3)(b)1 and 2; 9J-5.013(2)(b)2,3,4,6 and 10]

**Policy 202.16.1**

Monroe County shall meet periodically with agencies and local governments in the region to discuss water management practices and potential issues related to:

1. the delivery of water, both in terms of quantity and quality, to Card Sound, Barnes Sound and Florida Bay; and
2. alternatives to offshore disposal of waste.

These agencies and local governments shall include, at a minimum:

1. National Park Service;
2. DER;
3. South Florida Water Management District;
4. Dade County;
5. Collier County;
6. South Florida Regional Planning Council; and
7. Environmental Protection Agency.
8. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1,5,6,8 and 9]

**Policy 202.16.2**

Monroe County shall participate in preparing future revisions to the following plans:

1. Surface Water Improvement and Management Plan for the Everglades;
2. Surface Water Improvement and Management Plan for Biscayne Bay; and
3. any additional Surface Water Improvement and Management Plans which may be completed for Monroe County waters. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013 (2) (c) 1,5,6,8 and 9]

**GOAL 203**

The health and integrity of living marine resources and marine habitat, including mangroves, seagrasses, coral reefs and fisheries, shall be protected and, where possible, enhanced. [9J-5.012(3)(a); 9J-5.013(2)(a)]

**Objective 203.1**

Monroe County shall protect its mangrove wetlands by implementing regulations which will further reduce disturbances to mangroves and which will mitigate the indirect impacts of development upon mangroves. [9J-5.012(3)(b)1; 9J-5.013(2)(b)3 and 4]

**Policy 203.1.1**

As set forth in the Land Development Regulations (Monroe County BOCC, 1990), the open space requirement for mangroves shall be one hundred (100) percent. No fill or structures shall be permitted in mangrove wetlands except for elevated, pile-supported walkways, docks, piers and utility pilings. [9J-5.012(3)(c)1; 9J-5.013(2)(c)6]

**Policy 203.1.2**

Monroe County shall adopt a mangrove trimming ordinance for the Florida Keys. Regulations of this ordinance shall be developed in cooperation with the DER and shall be consistent with Chapter 17-321, F.A.C. These regulations shall restrict mangrove trimming to the minimal alteration necessary to maintain navigation in existing navigable channels and canals, or where necessary to allow an upland owner limited ingress and egress to waters in conjunction with a permitted structure installed according to the design guidelines of this plan and limited visual access consistent with or more restrictive than state standards. Any ordinance enacted pursuant to this policy shall not affect any mangrove alteration made by the County pursuant to the governmental exemptions contained in Florida's Mangrove Protection Act.

**Policy 203.1.3**

Monroe County shall require minimum vegetated setbacks of fifty (50) feet to be maintained as an open space buffer for development occurring adjacent to all types of wetlands except for tidally inundated mangrove fringes and as provided for in Policy 204.2.2, 204.2.3 and 204.2.4. If a 50-foot setback results in less than 2,000 square feet of principal structure footprint of reasonable configuration, then the setback may be reduced to allow for 2,000 square feet of principal structure footprint of reasonable configuration, provided that the setback is not reduced to less than twenty-five (25) feet. On properties classified as scarified adjacent to wetlands, the wetland setback may be reduced to twenty-five (25) feet, without regard to buildable area, if the entire setback area is planted and

maintained in native vegetation with a site-suitable stormwater management plan in accordance with County regulations approved by the County Biologist and placed under conservation easement. "Development" shall include all activities as currently defined in the F.S. 380.05-compliant Land Development Regulations, hereby incorporated by reference. The effectiveness of this policy shall be reviewed during the Evaluation and Appraisal Review (EAR) Process.

### **Objective 203.2**

Monroe County shall protect submerged lands vegetated with seagrasses by implementing regulations which will further reduce direct and indirect disturbances to seagrasses. [9J-5.012(3)(b)1; 9J-5.013(2)(b)3 and 4]

#### **Policy 203.2.1**

Upon adoption of the Comprehensive Plan, Monroe County shall prohibit the location of mooring sites over submerged land which is vegetated with seagrasses or characterized by a hard-bottom community, regardless of water depth, except as may be permitted by the Florida Department of Environmental Protection. This prohibition shall also apply to mooring fields. [9J-5.012(3)(c) 1,2,3 and 8; 9J-5.013(2)(c) 1 and 6]

#### **Policy 203.2.2**

Upon adoption of the Comprehensive Plan, Monroe County shall prohibit the termination of docking facilities and piers over submerged land which is vegetated with seagrasses or characterized by a hard-bottom community, regardless of water depth, except as may be permitted by the Florida Department of Environmental Protection. Design criteria to permit sunlight to reach the bottom shall be adopted. No boat shelters or gazebos shall extend over submerged lands vegetated with seagrasses or over hardbottom communities. [9J-5.012(3)(c) 1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

#### **Policy 203.2.3**

Effective upon plan adoption, Monroe County shall:

1. prohibit new dredging in the Florida Keys; and
2. prohibit maintenance dredging within areas vegetated with seagrass beds except for maintenance dredging in public navigation channels. (See Objective 202.8 and related policies.) [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

#### **Policy 203.2.4**

By July/August 1993, Monroe County shall seek to enter into an agreement with NOAA, EPA and DER regarding support of scientific studies of stresses on seagrass ecosystems in the Florida Keys region. This agreement shall be developed following completion of the Florida Keys National Marine Sanctuary Management Plan. This plan shall identify the research needs to be addressed in this agreement. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

#### **Policy 203.2.5**

Monroe County shall support the public education program for users of the Florida Keys National Marine Sanctuary as outlined in the Florida Keys National Marine Sanctuary Management Plan (U.S. Dept. of Commerce, NOAA, in preparation). This program shall

promote user education related to, among other items, seagrass bed conservation and navigational safety in nearshore waters. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 203.2.6**

By January 4, 1998, Monroe County shall enter digital information describing the location of seagrass beds in the Florida Keys into the County's Geographic Information System. These data shall be made available from the Florida Keys National Marine Sanctuary Management Program. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Objective 203.3**

Monroe County shall support state and federal agencies in development and implementation of management measures designed to protect coral reefs located in the waters off the Florida Keys. [9J-5.012(3)(b)1; 9J-5.013(2)(b)3 and 4]

**Policy 203.3.1**

By January 4, 1998, Monroe County shall seek to enter into an agreement with NOAA, EPA and DER regarding support of scientific studies of stresses on coral reef ecosystems in the Florida Keys region. This agreement shall be developed following completion of the Florida Keys National Marine Sanctuary Management Plan. This plan shall identify the research needs to be addressed in this agreement. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 203.3.2**

Monroe County shall support the public education program for users of the Florida Keys National Marine Sanctuary as outlined in the Florida Keys National Marine Sanctuary Management Plan (U.S. Dept. of Commerce, NOAA, in preparation). This program shall promote user education related to, among other items, coral reef conservation and navigational safety. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 203.3.3**

By January 4, 1998, Monroe County shall enter digital information describing the location of coral communities in the Florida Keys into the County's Geographic Information System. These data shall be made available from the Florida Keys National Marine Sanctuary Management Program. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 203.3.4**

Monroe County shall continue to protect, preserve and enhance the coral reef through its land development regulations which address water quality (see Conservation and Coastal Management Element Goal 202 and related objectives and policies), including efforts to:

1. limit the location of water-dependent activities to locations that will not have a significant adverse impact on the offshore resources of hard coral bottoms;
2. control and regulate land and water activities in the vicinity of coral as identified in the Florida Keys Coastal Management Study in an effort to arrest further deterioration; and
3. include the following management policies for John Pennekamp State Park and Looe Key National Marine Sanctuary:



- a) management and recreational activities in the designated areas must be consistent with preservation of these underwater preserves;
- b) development activity on Key Largo and islands facing the Looe Key National Marine Sanctuary, including dredging, filling, urban water run-off, and wastewater treatment facilities, will be controlled and regulated in order to minimize stresses which result in water quality deterioration; and
- c) the County will explore state and federal funding sources for the acquisition of land in the immediate vicinity of John Pennekamp State Park and Looe Key National Marine Sanctuary so as to create a buffer zone between urbanized and preservation areas. Monroe County will cooperate with State and Federal acquisition activities.

#### **Objective 203.4**

Monroe County shall support state and federal agencies in development and implementation of management measures designed to protect the fisheries of the Florida Keys. [9J-5.013(2)(b)4]

##### **Policy 203.4.1**

By January 4, 1998, Monroe County shall implement an ongoing coordination program with the NPS, SFWMD, Collier County and Dade County designed to address existing and potential land management problems in the region which may affect the conservation, use and protection of water quality and fisheries in Florida Bay. (See Objective 202.16 and related policies.) [9J-5.012(3)(b)1 and 2; 9J-5.013(2)(b)2,3,4,6 and 10]

##### **Policy 203.4.2**

Monroe County shall continue to propose actions for consideration by the Florida Marine Fisheries Commission designed to reduce adverse impacts of the Lobster Sport Fishing Season on the lobster fishery and sensitive marine resources of the Florida Keys. [9J-5.013(2)(c)6]

##### **Policy 203.4.3**

Monroe County shall periodically meet with the Florida Marine Fisheries Commission to assess measures which could be implemented by Monroe County to protect the fisheries of the Florida Keys. To the extent practicable, Monroe County shall take steps to implement such protection measures as may be identified through this cooperative effort. [9J-5.013(2)(c)6]

##### **Policy 203.4.4**

Monroe County shall support efforts to develop a comprehensive fisheries management program for the Florida Keys utilizing an ecosystem approach. This would propose consolidation of activities now distributed among the Florida Marine Fisheries Commission, the Division of Marine Resources, and the Florida Game and Fresh Water Fish Commission. [9J-5.013(2)(c)6]

##### **Policy 203.4.5**

By January 4, 1998, Monroe County shall adopt a mangrove trimming ordinance for the Florida Keys. (See Policy 203.1.2.) [9J-5.013(2)(c)6]

**Policy 203.4.6**

By January 4, 1998, Monroe County shall develop and implement a boating impacts management program which shall address the problem of propeller damage to seagrasses. (See Objective 203.6 and related policies.) [9J-5.013(2)(c)6]

**Policy 203.4.7**

Monroe County shall support scientific studies of stresses on seagrass and coral ecosystems in the Florida Keys region. (See Policies 203.2.4. and 203.3.1) [9J-5.013(2)(c)6]

**Policy 203.4.8**

Monroe County shall support, and wherever feasible, aid private and non-profit groups, as well as public agencies in promoting aquaculture. The purpose(s) of such aquaculture shall be to augment fisheries, limit stress on fisheries, and/or replace depleted stock in the Florida Keys. [9J-5.013(2)(c)6]

**Objective 203.5**

By January 4, 1998, Monroe County shall develop and implement a boating impacts management program. [9J-5.012(3)(b)1; 9J-5.013(2)(b)4]

**Policy 203.5.1**

Monroe County shall develop and implement siting and discharge regulations, fee requirements and enforcement provisions pertaining to moored/anchored vessels (live-aboards) in nearshore waters. (See Objective 202.4 and related policies.) [9J-5.012(3)(b)1,2 and 3; 9J-5.013(2)(b)2]

**Policy 203.5.2**

Monroe County shall develop a management plan for derelict vessels, including:

1. identification of procedures for locating and inventorying derelict vessels; and
2. identification of procedures for removal of derelict vessels.

Monroe County shall immediately commence implementation of the derelict vessel removal plan. [9J-5.012(3)(b)1,2 and 3; 9J-5.013(2)(b)2]

**Policy 203.5.3**

Monroe County shall develop criteria for marina siting which shall meet or exceed state standards and which shall rate potential marina sites. (See Objective 212.4 and related policies.) [9J-5.012(3)(b)1,2 and 3; 9J-5.013(2)(b)2]

**Policy 203.5.4**

Monroe County shall prepare a plan for mooring buoy sites. Two types of sites shall be identified, including:

1. live-aboard mooring sites (see Policy 202.4.2); and
2. short-term recreational mooring sites.

Identification of mooring sites shall be undertaken in coordination with NOAA, DER, and DNR, and shall be consistent with recommendations of the Florida Keys National Marine Sanctuary Management Plan (U.S. Dept. of Commerce, NOAA, in preparation). Mooring sites shall be entered into the County's Geographic Information System. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

#### **Policy 203.5.5**

Monroe County shall develop and commence implementation of strategies for protection of submerged lands in shallow water areas from boating impacts. These shall include strategies to reduce seagrass propeller scarring and to minimize vessel groundings. To accomplish this, Monroe County shall:

1. identify problem areas and issues related to channel and shallows marking;
2. establish criteria and priorities for identifying channels and shallows to be marked; and
3. make recommendations for channel marking and review these recommendations with NOAA and DNR.

Markers shall be installed after completion of the plan, as funding is available. Funding shall be obtained from a variety of federal, state and local funds, including Boating Improvement Funds. Enforcement shall be by the DNR Marine Patrol, NOAA, and FWS, depending upon location. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

#### **Policy 203.5.6**

By the effective date of this Plan, Monroe County shall recommend methods to improve boater education, based on the inventory of existing boater education programs.

The County's boater education program shall be designed and implemented in coordination with the Cooperative Extension Service, Florida Sea Grant, DNR and NOAA. It shall be consistent with recommendations of the Florida Keys National Marine Sanctuary Management Plan.

The boater education program shall place particular emphasis upon the following:

1. navigational safety, including channel locations, in nearshore and backcountry waters;
2. seagrass bed conservation
3. coral reef conservation
4. marine sanitation regulations;
5. litter and debris control regulations;

6. proper use of weed gates;
7. disposal of fish carcasses;
8. existing rules and regulations pertinent to user activities; and
9. general appreciation for marine resources, and awareness of user impacts. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 203.5.7**

Monroe County shall consider requests by the Boating Impacts Workshop to adopt speed controls in nearshore waters and/or creation of a boating restricted or boating protection zone. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 203.5.8**

Implementation of the boating management program recommendations shall be coordinated by the Monroe County Department of Marine Resources. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 203.5.9**

Monroe County shall establish a citizens advisory council for boating management. This group shall be appointed by the BOCC and shall be advisory to the BOCC, the Marine and Port Advisory Committee, and the Monroe County Department of Marine Resources regarding boating management issues. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Objective 203.6**

Monroe County shall coordinate development and implementation of programs and regulations to protect the living marine resources of the Florida Keys with other federal, state and local authorities with jurisdiction over marine activities within the Florida Keys. [9J-5.012(3)(b)1; 9J-5.013(2)(b)4]

**Policy 203.6.1**

Monroe County shall assist the DCA in developing a coordinated agency review pursuant to section 380.051, Florida Statutes. The Monroe County Growth Management Division shall continue to conduct meetings with the Department of Environmental Regulation, the National Oceanographic and Atmospheric Administration, the Department of Natural Resources, and the U.S. Army Corps of Engineers to identify the environmental issues and contradictions in rules and authorities related to the permitting process for marinas, docking facilities, piers, mooring sites, hardened vertical shoreline structures, and dredging in the Florida Keys. Within one year of the effective date of this comprehensive plan, after issues have been identified, Monroe County shall revise the Land Development Regulations. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 203.6.2**

Monroe County shall continue to support the Florida Keys National Marine Sanctuary (FKNMS) Management Program. This program shall include management strategies for the protection of living marine resources in the waters of the Florida Keys. The County shall:

1. participate in the formulation of the management plan;
2. recommend management strategies;
3. review the final management plan to assess the common goals and policies between the FKNMS management plan and this comprehensive plan;
4. coordinate with NOAA and other appropriate agencies to minimize redundancy and increase efficiency in the effort to accomplish common goals; and
5. enter into memoranda of understanding, as necessary, with NOAA and/or other agencies to specify which policies will be implemented by each agency. Monroe County shall implement those portions of the FKNMS Management Plan:
  - a) which are consistent with the goals, objectives, and policies of this comprehensive plan;
  - b) which are within the County's jurisdiction; and
  - c) for which funding is available.

**Policy 203.6.3**

By January 1998, Monroe County shall coordinate its boating impacts management activities with the those of NOAA, DNR Marine Patrol, DNR Park Service, and the U.S. FWS. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 203.6.4**

By January 4, 1997, Monroe County shall request NOAA, EPA, DNR, and DER to develop a plan to correct the deficiencies identified in the Florida Keys Monitoring Study dated July 1987 (205J).

**GOAL 204**

The health and integrity of Monroe County's marine and freshwater wetlands shall be protected and, where possible, enhanced. [9J-5.012(3)(a); 9J-5.013(2)(a)]

**Objective 204.1**

By January 4, 1998, Monroe County shall develop an information system to be used as the basis for regulating land development activities in wetland areas, to identify potential wetland restoration

sites, and to identify high quality wetland sites for possible future acquisition by the County, State and/or private non-profit conservation organizations. [9J-5.012(3)(b)1; 9J-5.013(2)(b)3]

**Policy 204.1.1**

Monroe County shall participate in the Florida Keys Advance Identification of Wetlands (ADID) Program. This program is designed to facilitate the regulatory process under Section 404 of the Clean Water Act of 1973 by providing comprehensive wetlands mapping and assessment information.

The proposed geographic scope of the ADID Program includes the entire Florida Keys, prioritized as follows:

1. privately-owned lands with development potential on the islands connected by US 1;
2. publicly-owned lands on the islands connected by US 1; and
3. offshore islands (which appear in imagery of the islands connected by US 1).

As part of the ADID Program, Monroe County shall:

1. inform and educate the public regarding wetlands protection and the application of information forthcoming from the ADID Program;
2. retain a consultant to map preliminary ACOE and DER jurisdictional lines;
3. compile wetlands mapping information on the County's geographic information system;
4. assist with development of a Florida Keys wetlands functional quality analysis;
5. assist with the functional assessment of wetlands;
6. assist with ground-truthing mapped information; and
7. assist with preparing a draft Technical Support Document. [9J-5.013(2)(c)9]

**Policy 204.1.2**

Monroe County shall cooperate with the Florida Game and Fresh Water Fish Commission (FGFWFC) in its ongoing effort to map freshwater wetlands and disturbed wetlands in the Lower Keys. [9J-5.013(2)(c)9]

**Policy 204.1.3**

Monroe County shall use the refined, up-to-date wetlands information made available from the ADID Program and from the FGFWFC to generate a new set of wetlands maps. These wetlands maps shall replace those currently in use by the County.

In order to prepare the new wetlands maps, Monroe County shall compile information obtained from the ADID Program and from the FGFWFC in the Geographic Information

System (GIS). The new composite map set shall be plotted by the GIS at a scale of 1"=200'. The maps and/or overlays shall show:

1. all undisturbed and disturbed marine and freshwater wetlands by vegetative cover type;
2. advisory ACOE and DER jurisdictional lines mapped as part of the ADID Program; and
3. wetland "suitable/unsuitable" designations with respect to ACOE Section 404 permitted activities mapped as part of the ADID Program (see Policy 204.1.3). [9J-5.013(2)(c)9]

**Policy 204.1.4**

As part of the ADID Program, Monroe County shall cooperate with the EPA, ACOE, FGFWFC, SFWMD and FWS to develop a wetlands functional assessment protocol. This assessment protocol shall be tailored for use in the Florida Keys and shall be based upon habitat suitability, water quality, and flood flow alteration functions of marine and freshwater wetlands. [9J-5.013(2)(c)9]

**Policy 204.1.5**

As part of the ADID Program, Monroe County, EPA, FWS, and FGFWFC will jointly carry out the functional analysis of wetlands. This shall be completed on all wetland vegetative cover areas within improved subdivisions and on selected sites outside improved subdivisions, according to statistically valid selected sample locations for each wetland vegetative cover type.

In addition to the functional analysis, the field team shall ground-truth the wetland vegetative cover maps using a differential global positioning system. The wetland vegetative cover boundaries in the GIS shall be revised to reflect results of the ground-truthing (see Policy 204.1.1). [9J-5.013(2)(c)9]

**Policy 204.1.6**

By September 30th of each year, Monroe County shall update the wetlands data in the Geographic Information System to reflect information obtained during wetlands permitting and wetland impact mitigation during the preceding year. [9J-5.013(2)(c)9]

**Objective 204.2**

Monroe County shall eliminate the loss of undisturbed wetlands and shall eliminate the net loss of disturbed wetlands. [9J-5.012(3)(b)1; 9J-5.013(2)(b)3]

**Policy 204.2.1**

Upon adoption of the Comprehensive Plan, the County shall utilize the Environmental Standards, found in Section 9.5-336 through 9.5-342 of the Land Development Regulations (hereby incorporated by reference) to protect submerged lands and wetlands. Accordingly, the open space requirement shall be one hundred (100) percent of the following types of wetlands:

1. submerged lands;
2. mangroves;
3. salt ponds;
4. freshwater wetlands;
5. freshwater ponds; and
6. undisturbed saltmarsh and buttonwood wetlands.

Allocated density (dwelling units per acre) shall be assigned to freshwater wetlands and undisturbed salt marsh and buttonwood wetland only for use as transferable development rights away from these habitats. Submerged lands, salt ponds, freshwater ponds and mangroves shall not be assigned any density or intensity. [9J-5.012(3)(c)1 and 2; 9J-5.013(2)(c) 6]

#### **Policy 204.2.2**

No structures shall be permitted in submerged lands, mangroves, salt ponds, or wetlands, except for elevated, pile-supported walkways, docks, piers and utility pilings. No fill shall be permitted in submerged lands, mangroves, salt ponds, or wetlands except;

1. as specifically allowed by Objective 212.6 and subsequent Policies;
2. to fill a manmade, excavated water body such as a canal or swimming pool if the Director of Environmental Resources determines that such filling will not have a significant adverse impact on marine or wetland communities; or
3. as needed for shoreline stabilization or beach renourishment projects with a valid public purpose that furthers the goals of the Monroe County Comprehensive Plan, as determined by the Directors of Planning and Environmental Resources. All such projects shall require approval by the Florida Department of Environmental Protection and the U.S. Army Corps of Engineers prior to the issuance of a County building permit. [9J-5.012(3)(c)1 and 2; 9J-5.013(2)(c)6]

#### **Policy 204.2.3**

No fill or structures shall be permitted in mangroves or wetlands except as allowed by Policy 204.2.2 (as amended) and for bridges extending over mangroves or wetlands that are required to provide automobile or pedestrian access to dwelling units located on upland areas within the same property for which there is no alternative means of access. Such bridges shall be elevated on pilings such that the natural movement of water, including volume, rate and direction of flow shall not be disrupted or altered. Upland areas shall include disturbed wetlands that have been lawfully converted into uplands through filling. (9J-5.012(3)(c)1 and 2; 9J-5.013(2)(c)6)

#### **Policy 204.2.4**

Notwithstanding other provisions of this comprehensive plan regarding disturbed wetlands, no development activities shall be allowed in wetlands pending completion of the ADID program (referenced in Policy 204.1.1 above) or other similar functional assessment of disturbed wetlands in the County. No later than January 4, 1999, the ADID or other



similar revised program shall assess the functional value of disturbed wetlands in the County and develop an evaluation index to determine the appropriate level of development for disturbed wetlands. Upon completion and adoption of the functional assessment, it shall be incorporated into the plan, along with a functional definition of disturbed wetlands, by plan amendment.

#### **Policy 204.2.6**

Monroe County shall adopt revised environmental standards and environmental design criteria which establish minimum vegetated setbacks of fifty (50) feet to be maintained as an open space buffer for development occurring adjacent to all types of wetlands except for tidally inundated mangrove fringes and as provided for in Policy 204.2.2, 204.2.3, and 204.2.4. If a 50-foot setback results in less than 2,000 square feet of principal structure footprint of reasonable configuration, then the setback may be reduced to allow for 2,000 square feet of principal structure footprint of reasonable configuration, provided that the setback is not reduced to less than twenty-five (25) feet. On properties classified as scarified adjacent to wetlands, the wetland setback may be reduced to twenty-five (25) feet, without regard to buildable area, if the entire setback area is planted and maintained in native vegetation with a site-suitable stormwater management plan in accordance with County regulations approved by the County Biologist and placed under conservation easement. "Development" shall include all activities as currently defined in the F.S. 380.05-compliant Land Development Regulations, hereby incorporated by reference. The effectiveness of this policy shall be reviewed during the Evaluation and Appraisal Review (EAR) Process.

#### **Policy 204.2.7**

Monroe County shall attempt to ensure that dredge and fill activities that require permits from federal, state, regional, and county regulatory authorities are done through a coordinated interagency review process. In addition, applicants for a dredge and fill permit shall be required to obtain all necessary permits from state and federal regulatory agencies prior to issuance of a County permit (see Policies 101.2.2 and 101.3.2.)

#### **Policy 204.2.8**

No "after-the-fact" permits shall be issued that violate Monroe County dredge and fill regulations. All illegal structures and fill shall be removed and damages mitigated. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

#### **Policy 204.2.9**

Monroe County shall develop a schedule of monetary penalties that provides for fair and equitable penalties for all dredge and fill violations. Penalty revenues obtained from these violations shall be set aside and used specifically for water quality enhancement projects. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

#### **Policy 204.2.10**

By January 4, 1998 or upon completion of the functional assessment of wetlands in the ADID program, Monroe County shall revise the land development regulations to include additional environmental standards pertaining to open space ratios, permitted uses, filling, and setbacks as may be deemed appropriate to protect wetland habitats. [9J-5.012(3)(c)1 and 2; 9J-5.013(2)(c)6]

**Objective 204.3**

By January 4, 1998, Monroe County shall initiate a program to restore disturbed marine and freshwater wetlands. (See Goal 210 and related objectives and policies.) [9J-5.012(3)(b)1; 9J-5.013(2)(b)3]

**Policy 204.3.1**

The Monroe County Department of Environmental Resources and Department of Marine Resources shall be responsible for developing and administering the wetlands restoration program. [9J-5.012(3)(c)2; 9J-5.013(2)(c)6]

**Policy 204.3.2**

A list of publicly-owned priority wetland restoration sites shall be drafted and updated every other year. This list shall be developed by Monroe County in consultation with representatives of the ACOE, EPA, FWS, DER, DNR, FGFWFC, and others as appropriate. Priority wetland restoration sites shall be those disturbed wetlands offering the greatest potential increase in functional value after mitigation, as determined in the Florida Keys ADID Program. [9J-5.012(3)(c)2; 9J-5.013(2)(c)6]

**Policy 204.3.3**

Monroe County shall work cooperatively with the ACOE, EPA, FWS, DER, DNR, FGFWFC, and others as appropriate, to determine funding sources to support the wetlands restoration program. [9J-5.012(3)(c)2; 9J-5.013(2)(c)6]

**Policy 204.3.4**

A wetlands restoration fund shall be established. This fund shall include, at a minimum,

1. restoration fees paid by landowners developing in disturbed salt marsh and buttonwood wetlands; and
2. fines collected by the Environmental Crimes Task Force for wetlands violations.

If possible, additional funds shall be obtained for the fund from state and federal agencies through fees, fines and/or special programs (as determined by Policy 204.3.3).

**Policy 204.3.5**

The Environmental Crimes Task Force shall enforce county regulations pertaining to illegal dumping. [9J-5.012(3)(c)2; 9J-5.013(2)(c)6]

**Policy 204.3.6**

The Environmental Crimes Task Force shall enforce county, state and federal regulations pertaining to illegal use of off-road and all terrain vehicles. [9J-5.012(3)(c)2; 9J-5.013(2)(c)6]

**Objective 204.4**

By January 4, 1998, Monroe County shall establish a program for acquiring high quality undisturbed salt marsh and buttonwood wetlands. (See Future Land Use Objective 102.4 and related policies.) [9J-5.012(3)(b)1; 9J-5.013(2)(b)3]

**Policy 204.4.1**

The Monroe County Department of Environmental Resources, in consultation with the Monroe County Department of Marine Resources, shall work cooperatively with the Monroe County Land Authority in developing and administering the wetlands acquisition

program. Acquisition shall be undertaken as part of the Monroe County Natural Heritage and Park Program. [9J-5.012(3)(c)2; 9J-5.013(2)(c)6]

**Policy 204.4.2**

A list of priority wetlands acquisition sites shall be drafted and updated annually. This list shall be developed by Monroe County in consultation with representatives of the ACOE, EPA, FWS, DER, DNR, FGFWFC, and others as appropriate. Priority wetland acquisition sites shall include the following:

1. wetlands having the greatest functional value as determined in the Florida Keys ADID Program;
2. wetlands which are documented habitat of species of special status; and/or
3. undisturbed and disturbed wetlands located within Improved Subdivisions. [9J-5.012(3)(c)2; 9J-5.013(2)(c)6]

**GOAL 205**

The health and integrity of Monroe County's native upland vegetation shall be protected and, where possible, enhanced. [9J-5.012(3)(a); 9J-5.013(2)(a)]

**Objective 205.1**

By January 4, 1998, Monroe County shall develop an information system which will provide more current and more refined data on upland vegetation in the Florida Keys than is now available. [9J-5.012(3)(b)1; 9J-5.013(2)(b)3]

**Policy 205.1.1**

The County shall establish a field method for mapping and preliminary evaluating upland habitats. [9J-5.013(2)(c)9]

**Policy 205.1.2**

The County shall complete ground-truthing of upland habitats, including mapping and preliminary habitat evaluations. Priority shall be given to the natural upland communities identified by the Florida Natural Areas Inventory. [9J-5.013(2)(c)9]

**Policy 205.1.3**

The County shall enter ground-truthed upland habitat location and evaluation data into the GIS. [9J-5.013(2)(c)9]

**Policy 205.1.4**

Vegetation data shall be plotted on the GIS at a scale of 1 inch equals 200 feet. [9J-5.013(2)(c)9]

**Policy 205.1.5**

Habitat evaluation index and permit data shall be incorporated into the GIS annually. [9J-5.013(2)(c)9]

**Policy 205.1.6**

The County shall coordinate its upland habitat mapping and evaluation efforts with those of federal and state agencies and private researchers so as to avoid duplication of effort. These agencies shall include, at a minimum, the EPA, ACOE, DER, DNR, SFWMD, FGFWFC, and the National Audubon Society (Research Department). [9J-5.013(2)(c)9]

**Objective 205.2**

Upon adoption of the Comprehensive Plan, Monroe County shall adopt revisions to the Land Development Regulations which further protect and provide for restoration of the habitat values of native upland communities, including hardwood hammocks and pinelands. [9J-5.012(3)(b)1; 9J-5.013(2)(b)3]

**Policy 205.2.1**

Upon adoption of the Comprehensive Plan, the County shall utilize the Habitat Evaluation Index (HEI), found in Section 9.5-336 through 9.5-342 of the Land Development Regulations, hereby incorporated by reference, to evaluate and protect sensitive habitats of the Florida Keys.

Upon adoption of the Comprehensive Plan, Monroe County shall complete revisions to the HEI which shall include, at a minimum, the following:

1. a written methodology for completing the HEI;
2. requirements for integrating data regarding the historic sightings of rare and endangered species and critical nesting/feeding areas for birds; and
3. evaluation criteria which will better differentiate high, medium and low quality habitat.

Before adoption, the revisions shall undergo scientific peer review by experts in terrestrial and wildlife ecology. To the extent possible, the reviewers shall include those individuals who participated in development of the existing HEI methodology. The comprehensive plan shall be amended to include the HEI revision.

**Policy 205.2.2**

Upon adoption of the Comprehensive Plan, Monroe County shall implement the Permit Allocation and Point System. Monroe County shall assign a negative point rating to developments which disturb native upland vegetation. Sites having high quality native upland vegetation shall receive a greater negative point rating than sites having medium and low quality native upland vegetation. Habitat value shall be determined through application of measures as specified in the HEI. (See Policy 101.5.4). [9J-5.012(3)(c)1, 2 and 3; 9J-5.014(2)(c)6]

**Policy 205.2.3**

Clustering requirements shall be revised to require the following:

1. when a parcel proposed for development contains more than one (1) habitat type, development shall be:
  - a) clustered on the least sensitive portion of the parcel, until the maximum allowable density is reached;
  - b) if further development occurs, it shall be clustered on the next least sensitive portion of the parcel, until maximum allowable density is reached, etc.; and
2. development permitted on the least sensitive portion(s) of a parcel shall be clustered within that portion(s) of the parcel.

Habitat sensitivity shall be defined by the ranking currently contained in the Land Development Regulations Section 9.5-345(a), hereby incorporated by reference.

**Policy 205.2.4**

Bulk regulations and development standards shall be reviewed and revised so as to allow greater flexibility for clustering.

**Policy 205.2.5**

Environmental Impact Assessments shall include identification of measures for protecting native upland vegetation (see Goal 218 and related objectives and policies). Successful implementation of these measures shall be required as a condition of issuance of a certificate of occupancy. [9J-5.013(2)(c)3]

**Policy 205.2.6**

The open space requirements for native upland vegetation communities which exhibit functional integrity and viability shall meet or exceed their existing percentages ,as follows:

- |                   |                  |      |
|-------------------|------------------|------|
| 1. high hammock   |                  |      |
| -                 | high quality     | 0.80 |
| -                 | moderate quality | 0.60 |
| -                 | low quality      | 0.40 |
| -                 | disturbed        | 0.40 |
| 2. low hammock    |                  |      |
| -                 | high quality     | 0.80 |
| -                 | moderate quality | 0.60 |
| -                 | low quality      | 0.40 |
| -                 | disturbed        | 0.40 |
| 3. palm hammock   |                  | 0.90 |
| 4. cactus hammock |                  | 0.90 |
| 5. pinelands      |                  |      |

- high quality 0.80
- low quality 0.60
- disturbed 0.60

6. scarified 0.20

The definition for open space shall be that currently contained in Section 9.5-4(O-3) of the F.S. 380.05-compliant Land Development Regulations, hereby incorporated by reference.

**Policy 205.2.7**

Clearing of native vegetation shall be limited to the immediate development area. The immediate development area shall include the area of approved clearing shown on the approved site plan. The immediate development area shall be fenced throughout the duration of construction. During construction, there shall be no disturbances of the ground surface and vegetation within required open space areas. [9J-5.013(2)(c)3]

**Policy 205.2.8**

Development shall not disturb the following vegetation:

1. champion trees;
2. specimen trees (diameter at breast height that is greater than seventy-five (75) percent of the record tree of the same species for the State of Florida); and
3. plant species listed by the FWS as threatened and endangered. [9J-5.013(2)(c)3]

**Policy 205.2.9**

Development shall be sited so as to minimize impacts on the following plants:

1. species listed by the Florida Department of Agriculture and Consumer Services as threatened, endangered or commercially exploited (excluding those specifically protected by Policy 205.2.8);
2. other locally rare native species (see Policy 205.3.1); and
3. native trees with diameter at breast height (dbh) of four (4) inches or greater.

In those instances, where an applicant can demonstrate that avoidance of such species or trees is not possible by clustering or by an alternate design approach, then successful transplantation of such species shall be considered on-site. "Successful" transplantation shall be defined as one-hundred (100) percent survival after a period of one (1) year.

Where the probability of survivability of transplanted plants is low (as determined in writing by the County Biologist), then the applicant shall be required to pay into the County Restoration Fund (see Goal 210 and related objectives and policies), or to donate nursery stock to county or state restoration projects. Donated nursery stock shall be identical in species composition to that which will be lost to construction. Stock shall be donated according to the following replacement schedule:

1. for native trees over four (4) inches dbh, three (3) replacements for each taken;
2. for listed species of any size, three (3) replacements for each taken; and
3. for locally rare native species, three (3) replacements for each taken.

In situations where replacement stock is not available, then a replacement schedule utilizing alternative species shall be approved in writing by the County Biologist. This alternative shall be utilized only after all possible sources of replacement species have been exhausted.

In situations where payments are made in lieu of donations of stock, such payments shall be sufficient to purchase stock in numbers corresponding to the above replacement schedule. [9J-5.013(2)(c)3]

**Policy 205.2.10**

Invasive exotic vegetation shall be removed from the development parcel as a condition for issuance of a Certificate of Occupancy. [9J-5.013(2)(c)3]

**Policy 205.2.11**

A list of invasive exotic upland plants shall be prepared by the County biologist. [9J-5.013(2)(c)3]

**Policy 205.2.12**

Monroe County shall apply all environmental regulations including open space according to the legal conditions of land existing as of February 28, 1986 and as depicted on the "December 1985 Habitat Classification Aerial Photographs," hereby incorporated by reference. These maps shall include a disclaimer statement to advise the public that the maps are generalized and that habitat designations are subject to verification through field inspections.

**Objective 205.3**

By January 4, 1998, Monroe County shall implement an expanded program for identification and protection of plant species of special status. These shall include plants designated as threatened and endangered by the FWS and those designated as threatened, endangered or commercially exploited by the Florida Department of Agriculture. [9J-5.013(2)(b)3]

**Policy 205.3.1**

Monroe County shall develop a list of locally rare plant species. This list shall include species which are rare within the Florida Keys but which do not have special status. [9J-5.013(2)(c)9]

**Policy 205.3.2**

Monroe County shall expand and update its maps showing occurrences of the following species:

1. plant species designated by the FWS as threatened and endangered;



2. plant species designated by the Florida Department of Agriculture as threatened, endangered or commercially exploited; and
3. plant species designated as locally rare.

Information shall be obtained from the Florida Natural Areas Inventory data base. It shall be entered into the County's GIS. To the extent possible, the historic occurrence data shall be plotted on specific parcels for which the occurrences were recorded. The GIS data base shall be updated annually. [9J-5.013(2)(c)9]

**Policy 205.3.3**

Monroe County shall actively participate in the Florida Champion Tree Program of the Florida Department of Agriculture. [9J-5.013(2)(c)9]

**Policy 205.3.4**

Monroe County shall work cooperatively with the FWS to promote the recovery of plant species designated by the federal government as threatened and endangered. Related activities shall include:

1. identification of sites in the Keys with key tree-cactus (*Cereus robinii*), Small's milkpea (*Galactia smallii*), and Garber's spurge (*Euphorbia garberi*);
2. notification to the FWS when development proposals are received for sites having historic and/or current occurrences of federally-designated plant species list in (1.) above;
3. cooperation with the FWS in locating potential introduction sites for federally-designated plant species; and
4. technical assistance, and where possible, financial assistance, with acquisition of:
  - a) sites having known populations of federally-designated plant species; or
  - b) sites deemed highly suitable as re-introduction sites for such species. [9J-5.013(2)(c)9]

**Objective 205.4**

By January 4, 1998, Monroe County shall implement an ongoing coordination program with the NPS, SFWMD, Collier County and Dade County designed to address existing and potential land management problems in the region which may affect unique vegetative communities on mainland Monroe County. (See Objective 202.16 and related policies). [9J-5.012(3)(b)1 and 2; 9J-5.013(2)(b)2,3,4,6 and 10]

**Objective 205.5**

By January 4, 1998, Monroe County, together with private, state, and federal agencies, shall establish a program for acquiring undisturbed native upland habitat. (See Future Land Use Objective 102.4 and related policies). [9J-5.012(3)(b)4; 9J-5.013(2)(c)6]

**Policy 205.5.1**

The Monroe County Department of Environmental Resources shall work cooperatively with the Monroe County Land Authority in developing and administering the acquisition program. Acquisition shall be undertaken as part of the Monroe County Natural Heritage and Park Program. [9J-5.012(3)(c)2; 9J-5.013(2)(c)6]

**Policy 205.5.2**

A list of priority native upland habitat acquisition sites shall be drafted and updated annually. This list shall be developed by Monroe County in consultation with representatives of DNR, the National Audubon Society Research Department, The Nature Conservancy, and others as appropriate. Priority native upland vegetation acquisition sites shall include those which:

1. are determined to be high quality habitat (through the HEI);
2. include plant species of special status;
3. are documented habitat for wildlife species of special status;
4. are located within Improved Subdivisions; and/or
5. are documented as significant coastal upland natural communities by the Florida Natural Areas Inventory. [9J-5.012(3)(c)2; 9J-5.013(2)(c)6]

**Objective 205.6**

By January 4, 1998, Monroe County shall initiate a program to restore and maintain disrupted native upland vegetation systems on public lands. (See Objective 210.1 and related policies). [9J-5.012(3)(b)4; 9J-5.013(2)(c)6]

**GOAL 206**

The health and integrity of Monroe County's beach/berm resources shall be protected and, where possible, enhanced. [9J-5.012(3)(a); 9J-5.013(2)(a)]

**Objective 206.1**

Upon adoption of the Comprehensive Plan, Monroe County shall revise the Land Development Regulations to include revised development standards pertaining to permitted uses, siting of structures, disturbances, removal of invasive vegetation, and restoration of native vegetation in undisturbed and disturbed beach/berm areas. [9J-5.012(3)(b)4]

**Policy 206.1.1**

Upon adoption of the Comprehensive Plan, Monroe County shall implement the Permit Allocation and Point System. Monroe County shall assign a negative point rating to developments which require disturbance of undisturbed beach/berm areas. (See Policy 101.5.4). [9J-5.012(3)(c)1,2 and 3; 9J-5.013(2)(c)6]

**Policy 206.1.2**

Minimum coastal construction setbacks currently in use in Monroe County shall be reviewed in coordination with DNR. Existing setbacks in the Land Development Regulations (Monroe County BOCC, 1990) shall be revised as deemed appropriate based upon findings of this review. (See Objective 212.2 and related policies). [9J-5.012(3)(c)1,2 and 3; 9J-5.013(2)(c)6]

**Policy 206.1.3**

Permitted uses within the shoreline setback along natural shorelines characterized by beach/berm vegetation shall be limited to docks and walkways. Access shall be restricted to wooden dune walkover structures which, in the absence of a dock, shall terminate at the waterward toe of the dune. All structures shall be elevated on pilings or other supports. [9J-5.012(3)(c)1,2 and 3; 9J-5.013(2)(c)6]

**Policy 206.1.4**

No beach/berm material shall be excavated or removed and no fill shall be deposited on a beach/berm. [9J-5.012(3)(c)1,2 and 3; 9J-5.013(2)(c)6]

**Policy 206.1.5**

Clearing of beach/berm vegetation in the area landward of the shoreline setback shall be limited to the minimum clearing required to allow development of a permitted use. Prior to commencement of construction, the immediate area required for construction shall be enclosed with fencing. No vehicular or pedestrian traffic shall be permitted outside the fenced areas for the duration of the construction period. All areas disturbed during construction shall be managed to avoid the introduction and/or establishment of invasive exotic species.[9J-5.012(3)(c)1,2 and 3; 9J-5.013(2)(c)6]

**Policy 206.1.6**

Beach/berm areas disturbed during construction shall be immediately restored to stable condition. Restoration techniques shall be designed to achieve the maximum stability possible. Native plants shall be used exclusively in re-vegetation. [9J-5.012(3)(c)1,2 and 3; 9J-5.013(2)(c)3 and 6]

**Policy 206.1.7**

Invasive exotic vegetation shall be removed from the development site as a condition for issuance of a Certificate of Occupancy. [9J-5.012(3)(c)1,2 and 3; 9J-5.013(2)(c)3 and 6]

**Policy 206.1.8**

A list of invasive exotic beach/berm plants shall be prepared by the County Biologist. [9J-5.013(2)(c)3; 9J-5.013(2)(c)6]

**Policy 206.1.9**

Existing and new outdoor lighting shall be restricted/or prohibited, as appropriate, so as to avoid adverse impacts on beach nesting areas (see Policies 207.9.6 and 207.9.7). [9J-5.012(3)(c)1,2 and 3; 9J-5.013(2)(c)6]

**Policy 206.1.10**

Seawalls shall be prohibited on any beach or open water shoreline. [9J-5.012(3)(c)1,2 and 3; 9J-5.013(2)(c)6]

**Objective 206.2**

By January 4, 1998, Monroe County shall initiate a program to restore and maintain disturbed beach/berm resource areas on public lands. (See Objective 210.1 and related policies.) [9J-5.012(3)(b)4; 9J-5.013(2)(c)6]

**Objective 206.3**

Beginning in 1998, Monroe County shall prepare annual beach management plans for all publicly-owned beaches (see Recreation and Open Space Objective 1201.11 and related policies). These plans shall be prepared by September 30th of each year. They shall be consistent with the current county restoration plan (see Objective 210.1 and related policies). [9J-5.012(3)(b)4; 9J-5.013(2)(c)6]

**Objective 206.4**

By January 4, 1998, Monroe County shall establish a program for acquiring undisturbed beach/berm resource areas (see Future Land Use Objective 102.4 and related policies). [9J-5.012(3)(b)4; 9J-5.013(2)(c)6]

**Policy 206.4.1**

The Monroe County Department of Environmental Resources shall work cooperatively with the Monroe County Land Authority in developing and administering the beach/berm acquisition program. Acquisition shall be undertaken as part of the Monroe County Natural Heritage and Park Program. [9J-5.012(3)(c)2; 9J-5.013(2)(c)6]

**Policy 206.4.2**

A list of priority undisturbed beach/berm acquisition sites shall be drafted and updated annually. This list shall be developed by Monroe County in consultation with representatives of the DNR and others, as appropriate. Priority beach/berm acquisition sites shall include those which:

1. are documented nesting sites for state- and federally- designated species (see Policy 207.9.2); and/or
2. can accommodate public recreation uses without adverse impacts on sensitive natural resources (see Parks and Open Space Element Policy 1201.2.4); and/or
3. are located within Improved Subdivisions. [9J-5.012(3)(c)2; 9J-5.013(2)(c)6]

## **GOAL 207**

Monroe County shall protect and conserve existing wildlife and wildlife habitats. [9J-5.012(3)(a); 9J-5.013(2)(a)]

### **Objective 207.1**

By January 4, 1997, Monroe County shall adopt revisions to the Land Development Regulations which shall protect wildlife and wildlife habitat from adverse impacts of development. [9J-5.012(3)(b)1; 9J-5.013(2)(b)6]

#### **Policy 207.1.1**

An Environmental Impact Assessment (EIA) shall be required for major development projects. (See Goal 218 and related objectives and policies.)

As part of the EIA, the applicant shall be required to complete the following activities related to wildlife and wildlife habitat:

1. a species survey to include, at a minimum, species of special status that are known to inhabit biological communities similar to those existing on the site in the project area;
2. an assessment of probable impacts on those species associated with the proposed development; and
3. identification of measures that will avoid or lessen the identified wildlife impact.

Monroe County shall, when deemed appropriate, incorporate the wildlife impact avoidance measures as stipulations for the land development order. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

#### **Policy 207.1.2**

Upon adoption of the Comprehensive Plan, the existing Habitat Evaluation Index (HEI), found in Sections 9.5-336 through 9.5-342 of the Land Development Regulations (Monroe County BOCC, 1990), and which is adopted by reference in this Comprehensive Plan, shall be revised to give greater consideration to the habitat of species of special status and critical nesting/feeding areas for birds. The HEI shall be revised to include, at a minimum, the following:

1. a written methodology for completing the HEI;
2. requirements for integrating data regarding the historic sightings of rare and endangered species and critical nesting/feeding areas for birds; and
3. evaluation criteria which will better differentiate high, medium and low quality habitat.

Before adoption, the revisions shall undergo scientific peer review by experts in terrestrial and wildlife ecology. To the extent possible, the reviewers shall include those individuals who participated in development of the existing HEI methodology. (See Policy 205.2.1). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.1.3**

Development shall be prohibited on offshore islands (including spoil islands) which have been documented as an established bird rookery, as identified on the current Protected Animal Species Map. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.1.4**

The Open Space Requirement for undisturbed salt marsh and buttonwood wetlands shall be one hundred (100) percent. (See Policy 204.2.1). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.1.5**

Clustering requirements shall be revised so as to reduce habitat fragmentation (see Policy 205.2.3). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Objective 207.2**

By January 4, 1998, Monroe County shall provide guidance to private landowners to reduce disturbances to wildlife species designated by the FWS and the State as threatened or endangered. [9J-5.012(3)(b)1; 9J-5.013(2)(b)6]

**Policy 207.2.1**

The Monroe County Biologist, in coordination with DNR, FGFWFC, and the FWS, shall prepare management guidelines for wildlife species designated as threatened and endangered by the state and federal governments. To the maximum extent possible, the County shall rely on guidelines and public educational materials prepared by the state and federal governments.

The guidelines shall provide public education to residents and prospective developers within critical habitat areas regarding activities disruptive or harmful to specific wildlife species. As appropriate for each species, the guidelines shall address items such as feeding, free-roaming domestic pets, noise, traffic, fencing, pesticide applications, etc. Existing laws and penalties for their violation shall be identified. A separate set of guidelines shall be developed for each species. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.2.2**

Monroe County shall make the management guidelines for designated wildlife species available to the general public. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.2.3**

Monroe County shall, as appropriate, incorporate specific management guidelines for state- and federally-designated wildlife species as stipulations for land development orders. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Objective 207.3**

Monroe County shall protect native wildlife species, especially state- and federally-designated species, from disturbance and predation by free-roaming domestic pets, particularly cats and dogs. [9J-5.012(3)(b)1; 9J-5.013(2)(b)6]

**Policy 207.3.1**

Big Pine and No Name Keys shall be high priority areas for controlling free-roaming dogs. In addition, by January 4, 1998, the County Biologist shall identify other areas within the County where priority should be placed in enforcing animal control laws so as to protect native wildlife populations. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.3.2**

The County Biologist shall meet periodically with the Monroe County Animal Control Department to review priorities for animal control (as identified pursuant to Policy 207.3.1). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.3.3**

By January 4, 1998, the Monroe County Animal Control Department shall develop and begin implementation of an Animal Control Plan. This plan shall address long-term staffing and facility needs within the Upper, Middle and Lower Keys for protecting residents and native wildlife populations from the hazards of free-roaming domestic pets. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Objective 207.4**

Monroe County shall protect its native wildlife populations from invasive exotic wildlife species. [9J-5.012(3)(b)1; 9J-5.013(2)(b)6]

**Policy 207.4.1**

By January 4, 1998, the Monroe County Biologist shall coordinate with the FGFWFC and the FWS to develop a list of undesirable exotic wildlife species (exclusive of horses, domestic dogs, and domestic cats). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.4.2**

By January 4, 1998, Monroe County shall adopt an exotic wildlife ordinance which shall prohibit and/or restrict the sale and handling of listed undesirable exotic species (exclusive of horses, domestic dogs, and domestic cats). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Objective 207.5**

By January 4, 1998, Monroe County shall implement an expanded program for mapping occurrences and habitat of species of special status. These shall include wildlife species designated as threatened and endangered by the FWS and those designated as threatened, endangered or species of special concern by the FGFWFC. [9J-5.012(3)(b)1; 9J-5.013(2)(b)6]

**Policy 207.5.1**

Monroe County shall develop a list of locally rare wildlife species. This list shall include species which are rare within the Florida Keys but which do not have special status. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.5.2**

Monroe County shall expand and update its maps showing occurrences of the following species:

1. wildlife species designated as threatened and endangered by the FWS;
2. wildlife species designated as threatened, endangered or species of special concern by the FGFWFC; and
3. wildlife species designated as locally rare.

Information shall be obtained from the Florida Natural Areas Inventory data base. It shall be entered into the County's GIS. To the extent possible, the historic occurrence data shall be plotted on specific parcels for which the occurrences were recorded. GIS data shall be updated annually. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.5.3**

Monroe County shall seek an interagency agreement with the Florida Natural Areas Inventory, FGFWFC, and FWS to assist the County in identifying the probable concentrated range of wildlife species of special status. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Objective 207.6**

By January 4, 1998, Monroe County shall implement a cooperative program with the FWS, DNR, and FGFWFC to promote the recovery of wildlife species designated by the federal government as threatened and endangered. [9J-5.012(3)(b)1; 9J-5.013(2)(b)6]

**Policy 207.6.1**

Monroe County shall routinely notify the FWS, DNR, and FGFWFC, as appropriate, when development proposals are received for sites having historic and/or current occurrences of species designated as threatened or endangered by the federal and state governments. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.6.2**

Monroe County shall cooperate with the FWS and FGFWFC in locating potential introduction sites for federally-designated wildlife species. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.6.3**

Monroe County shall provide technical assistance, and where possible, financial assistance with acquisition of:



1. sites having known populations of federally-designated wildlife species; or
2. sites deemed highly suitable as reintroduction sites for such species.

Site acquisition shall be considered through the Monroe County Natural Heritage and Park Program. (See Future Land Use Objective 102.4 and related policies). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

#### **Policy 207.6.4**

Monroe County shall support special activities to protect specific species designated by the FWS as threatened or endangered (pursuant to FCAA Rule Chapter 48-7). (See Objectives 207.8 through 207.13 and related policies). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

#### **Policy 207.6.5**

Monroe County shall continue to monitor water connections and hookups by the FCAA to confirm compliance with mandatory requirements of the FWS. These FWS requirements prohibit water connections or hookups within National Wildlife Refuge areas or hardwood hammock areas within its jurisdiction. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

### **Objective 207.7**

Monroe County shall implement activities to prohibit the destruction of the federally-designated Key deer (*Odocoileus virginianus clavium*) and to protect its habitat. [9J-5.012(3)(b)1; 9J-5.013(2)(b)6]

#### **Policy 207.7.1**

Monroe County shall regulate future development and coordinate the provision of public facilities on Big Pine Key and No Name Key, consistent with the Goals, Objectives and Policies of this Comprehensive Plan and in order to:

1. protect the Key deer;
2. preserve and enhance the habitat of the Key deer; and
3. maintain the rural, suburban, and open space character of Big Pine Key. (See Future Land Use Objective 103.1 and related policies.) [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

#### **Policy 207.7.3**

By January 4, 1998, Monroe County shall identify Key deer habitat areas as priority acquisition sites for conservation purposes. Emphasis shall be placed upon acquisition of movement corridors, sources of freshwater, and undisturbed native vegetation areas which are located within Improved Subdivisions and which are outside of the acquisition areas identified by the FWS (for the National Key Deer Refuge), DNR (for the Coupon Bight CARL Project), and SFWMD (for the Big Pine Key Save Our Rivers project).

Acquisition shall be considered through the Monroe County Natural Heritage and Park Program. (See Future Land Use Objective 102.4 and related policies). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.7.4**

By January 4, 1998, Monroe County shall meet with federal agencies, state agencies, and private non-profit conservation organizations, to determine how the County can support programs for acquisition of land for conservation purposes within habitat areas of the Key deer. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.7.5**

By January 4, 1998, Monroe County shall identify the freshwater lens systems and associated recharge areas on Big Pine Key and adjacent keys. Special measures shall be implemented to protect the quantity and quality of groundwater recharge to the freshwater lenses. (See Natural Groundwater Aquifer Recharge Element Objective 1101.2 and related policies.) [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.7.6**

Monroe County shall monitor FKAA compliance with federal regulations prohibiting potable water hookups to designated habitat areas of the Key deer (pursuant to FKAA Rules Chapter 48-7). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.7.7**

By January 4, 1998, Monroe County shall initiate actions to discourage tour groups on Big Pine Key. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.7.8**

By January 4, 1998, the County Biologist shall designate Key deer habitat on Big Pine Key, No Name Key, and other keys as appropriate, as priority areas for enforcement of animal control laws (pursuant to Policy 207.3.1). Adequate staff shall be provided at the animal shelter on Big Pine Key to enforce animal control laws (determined pursuant to Policy 207.3.3). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.7.9**

By January 4, 1998, Monroe County shall incorporate specific management guidelines to protect Key deer (developed pursuant to Policy 207.2.3) as stipulations for land development orders for all development occurring on Big Pine and No Name Keys. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.7.10**

By January 4, 1997, Monroe County shall adopt revisions to the Land Development Regulations pertaining to construction of fences on Big Pine Key. These shall limit fencing to the enclosure of the buildable area of a property to provide for Key deer circulation and to avoid hazardous conditions for children and Key deer. (9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6)

**Policy 207.7.11**

Monroe County, in cooperation with the FWS, shall develop and implement roadside management techniques which allow greater visibility of Key deer and which decrease Key

deer feeding on shoulders in high highway mortality areas on Big Pine Key. These techniques may include clearing and graveling of road shoulders along Key Deer Boulevard, Watson Boulevard, and Wilder Road. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 & 6]

**Policy 207.7.12**

By January 4, 1997, Monroe County shall meet with the FWS to determine measures which can be taken by the County to support the FWS in enforcing existing no feeding laws pertaining to the Key deer. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.7.13**

On an ongoing basis, Monroe County shall strictly enforce speed limits on roads on Big Pine, No Name, Big Torch, Middle Torch and Cudjoe Keys. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.7.14**

By January 4, 1998, Monroe County shall initiate volunteer programs to encourage landowners to voluntarily remove Brazilian pepper, Australian pines and other invasive plants from their properties. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.7.15**

By January 4, 1998, Monroe County shall distribute management guidelines for Key deer (developed pursuant to Policy 207.2.1) to private landowners on Big Pine Key. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.7.16**

The Monroe County Biologist shall meet routinely with the director of the National Key Deer Refuge to review progress toward attainment of Key deer management objectives and the need for implementation of revised or additional management actions for Key deer protection. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.7.17**

Monroe County shall coordinate with FWS and FGFWFC to develop criteria to determine roadway management techniques to reduce vehicular deer collisions within the National Key Deer Refuge.

**Objective 207.8**

Monroe County shall implement activities to prohibit the destruction of the Florida manatee (*Trichechus manatus*), American Crocodile (*Crocodylus acutus*), and marine turtles, as well as to protect the habitat of these species. Species of marine turtles to be protected shall include the Atlantic Loggerhead Turtle (*Caretta caretta*), Leatherback Turtle (*Dermochelys coriacea*), Atlantic Hawksbill Turtle (*Eretmochelys imbricata*), Green Turtle (*Chelonia mydas*), and any other marine turtle using Monroe County beaches as nesting habitat. [9J-5.012(3)(b)1; 9J-5.013(2)(b)6]

**Policy 207.8.1**

By January 4, 1997, Monroe County shall revise the Land Development Regulations to include revised development standards pertaining to permitted uses, siting of structures, disturbances, removal of invasive vegetation, and restoration of native vegetation in

beach/berm areas. (See Objective 206.1 and related policies). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.8.2**

By January 4, 1998, Monroe County shall initiate a program to restore and maintain disturbed beach/berm areas on public lands. (See Policies 210.1 through 210.9). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.8.3**

By January 4, 1998, Monroe County shall develop and implement a boating impacts management program for protection of marine turtles and manatees. (See Objective 203.6 and related policies).

**Policy 207.8.4**

By January 4, 1997, Monroe County shall adopt revisions to the Land Development Regulations which will reduce pollutant discharges into surface waters from dredge and fill activities. (See Objective 202.8 and related policies). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.8.5**

Upon completion of the Florida Keys National Marine Sanctuary Plan, Monroe County shall amend the Comprehensive Plan to specify how the County will assist in implementation of the plan for an oil spill response team for the Florida Keys. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.8.6**

By January 4, 1998, Monroe County shall adopt a turtle protection ordinance. Regulations of this ordinance shall apply to existing and new development and shall generally accomplish the following:

1. prohibit activities disruptive to marine turtles;
2. establish standards for preventing interior lighting from illuminating nesting areas during the nesting season;
3. establish standards for mechanical beach cleaning; and
4. protect marine turtles from predation. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.8.7**

Monroe County shall protect marine turtles, crocodiles, and alligators from land development activities. Regulations shall generally accomplish the following:

1. restrict existing and prohibit new beachfront outdoor lighting in the vicinity of nesting areas;
2. prohibit structures within fifty (50) feet of the crest of the beach/berm for any beach which is known to serve as an active nesting area;

3. establish general standards for coastal construction in the vicinity of active nesting areas; and
4. require removal of invasive exotic vegetation from development sites in beach/berms as a condition of development approval for adjacent uplands.

**Policy 207.8.8**

Monroe County shall support and, when appropriate, assist the conservation efforts of Save A Turtle, Inc. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.8.9**

Staff of the Monroe County Department of Environmental Resources and the Monroe County Department of Marine Resources shall attend routine DNR training sessions in marine turtle handling. This training shall qualify staff to handle marine turtles and their eggs, as appropriate, when they are observed during beach site inspections. [9J-5.012(3)(c)1]

**Policy 207.8.10**

By January 4, 1998, Monroe County shall identify undisturbed beach nesting habitat of marine turtles as priority acquisition sites for conservation purposes. Particular emphasis shall be placed upon acquisition of undisturbed beaches which are located within Improved Subdivisions.

Acquisition shall be considered through the Monroe County Natural Heritage and Park Program. (See Future Land Use Objective 102.4 and related policies). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.8.11**

By January 4, 1998, Monroe County shall consider requests by the Boating Impacts Workshop to adopt speed controls in nearshore waters and/or creation of a boating restricted or boating protection zone. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 207.8.12**

Monroe County shall monitor FKAA compliance with federal regulations prohibiting potable water hookups to designated habitat areas of the American crocodile (pursuant to FKAA Rules Chapter 48-7). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Objective 207.9**

Monroe County shall protect the critical nesting and resting sites of its bird populations, including permanent and transient species. [9J-5.012(3)(b)1; 9J-5.013(2)(b)6]

**Policy 207.9.1**

By January 4, 1998, the Monroe County Biologist, in cooperation with DNR, FGFWFC, FWS, and the National Audubon Society Research Department shall update the list of offshore island bird rookeries where development shall be prohibited. Until the list is updated, the offshore islands which are established bird rookeries shall be defined as any offshore island designated as a known habitat for a nesting bird on the latest update of the

Protected Animal Species Map. (See Policy 207.1.3, 207.9.1 and 1301.7.10.) [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.9.2**

By January 4, 1998, the Monroe County Biologist, in cooperation with DNR, FGFWFC, and the National Audubon Society Research Department shall compile a list of nesting sites in the Lower, Middle and Upper Keys known to be used by federally-designated birds, including the southern bald eagle (*Haliaeetus leucocephala*), roseate tern (*Sterna dougallii*), piping plover (*Charadrius melodus*), perrigrine falcon (*Falco peregrinus tundrius*), and least tern (*Sterna antillarum*). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.9.3**

By January 4, 1998, the Monroe County Biologist shall prepare management guidelines for private landowners to address the special sensitivity during the nesting period of the southern bald eagle (*Haliaeetus leucocephala*), osprey (*Pandion haliaetus*), the brown pelican (*Pelecanus occidentalis*), and the roseate tern (*Charadrius melodus*). Development of these guidelines shall be undertaken in coordination with the Florida Game and Freshwater Fish Commission and the FWS. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.9.4**

By January 4, 1997, Monroe County shall retain existing regulations of Section 9.5-478 of the Land Development Regulations (Monroe County BOCC, 1990) which limit land uses and establish wildlife habitat protection measures for wintering grounds of the piping plover (*Charadrius melodus*) on Ohio Key. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.9.5**

By January 4, 1996, Monroe County shall adopt Land Development Regulations which prohibit new or expanded hotel or motel development, including recreational vehicle spaces and camps sites, until December 31, 2001. This prohibition shall apply to recreational vehicle spaces (permitted by Section 9.5-478 of the Land Development Regulations (Monroe County BOCC, 1990)) on Ohio Key in the vicinity of the piping plover (*Charadrius melodus*) wintering grounds. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.9.6**

By January 4, 1997, Monroe County shall meet with the FWS to determine measures which can be taken by Monroe County to support the FWS with its planned acquisition of piping plover (*Charadrius melodus*) wintering grounds on Ohio Key. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.9.7**

By January 4, 1998, Monroe County shall identify the following as priority acquisition sites for conservation purposes:

1. nesting sites of the southern bald eagle (*Haliaeetus leucocephala*), osprey (*Pandion haliaetus*), the brown pelican (*Pelecanus occidentalis*), and the roseate tern (*Sterna dougallii*); and
2. wintering grounds for the peregrine falcon (*Falco peregrinus*) and the piping plover (*Charadrius melodus*).

Acquisition shall be considered through the Monroe County Natural Heritage and Park Program. (See Future Land Use Objective 102.4 and related policies.) [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

#### **Objective 207.10**

Monroe County shall implement activities to prohibit the destruction of the federally-designated Schaus' swallowtail butterfly (*Heraclides aristodemus ponceanus*). [9J-5.012(3)(b)1; 9J-5.013(2)(b)6]

#### **Policy 207.10.1**

By January 4, 1998, Monroe County, in cooperation with the FWS and FGFWFC, shall identify the native upland habitats used by the Schaus' swallowtail butterfly which are not protected in publicly-owned conservation lands. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

#### **Policy 207.10.2**

By January 4, 1998, sites identified pursuant to Policy 207.10.1 shall be identified as priority acquisition sites for conservation purposes.

Acquisition shall be considered through the Monroe County Natural Heritage and Park Program. (See Future Land Use Objective 102.4 and related objectives and policies.) [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

#### **Policy 207.10.3**

Upon adoption of the Comprehensive Plan, Monroe County shall implement the Permit Allocation and Point System. Monroe County shall assign a negative point rating to developments proposed within hammocks (identified pursuant to Policy 207.10.1) used by the Schaus' swallowtail butterfly. (See Policy 101.5.4). [9J-5.012(3)(c)5 and 6]

#### **Policy 207.10.4**

Monroe County shall coordinate regularly with the Mosquito Control District to promote continued conformance with aerial pesticide spraying guidelines for avoiding Schaus' swallowtail butterfly habitat. [9J-5.012(3)(c)1; 5.013(2)(c)5 and 6]

#### **Policy 207.10.5**

Upon adoption of the Comprehensive Plan, the existing Habitat Evaluation Index (HEI), found in Section 9.5-336 through 9.5-342 of the Land Development Regulations (Monroe County BOCC, 1990), and which is adopted by reference in this Comprehensive Plan, shall be revised to better protect high quality upland vegetative communities and threatened and endangered species. The HEI shall be revised to include, at a minimum, the following:

1. a written methodology for completing the HEI;
2. requirements for integrating data regarding the historic sightings of rare and endangered species and critical nesting/feeding areas for birds; and
3. evaluation criteria which will better differentiate high, medium and low quality habitat

Before adoption, the revisions shall undergo scientific peer review by experts in terrestrial and wildlife ecology. To the extent possible, the reviewers shall include those individuals who participated in development of the existing HEI methodology. (See Policy 205.2.1.) [9J-5.013(2)(c)3]

**Policy 207.10.6**

Monroe County shall promote research and development of mosquito control methods which are an alternative to aerial spraying. (See Objective 202.11 and related policies.) [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.10.7**

Monroe County shall encourage planting of torchwood (*Amyris elemifera*) within the range of the Schaus' swallowtail butterfly habitat. Restoration sites shall be re-vegetated, in part, with torchwood. Tree donations for replacement shall include torchwood. (9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6)

**Policy 207.10.8**

Monroe County shall monitor FCAA compliance with federal regulations prohibiting potable water hookups to designated habitat areas of the Schaus' swallowtail butterfly (pursuant to FCAA Rules Chapter 48-7). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Objective 207.11**

Monroe County shall implement activities to prohibit the destruction of the federally-designated Stock Island tree snail (*Orthalicus reses*). [9J-5.012(3)(b)1; 9J-5.013(2)(b)6]

**Policy 207.11.1**

The Monroe County Biologist shall continue to provide periodic population counts for the Stock Island tree snail to the FWS. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.11.2**

By January 4, 1998, Monroe County shall take actions to work with the Monroe County Mosquito Control Board to direct spraying of mosquito control pesticides away from critical habitat of the Stock Island Tree Snail. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.11.3**

By January 4, 1998, Monroe County shall cooperate with the FWS in locating potential introduction sites for the Stock Island Tree Snail. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]



**Policy 207.11.4**

By January 4, 1998, potential introduction sites for the Stock Island tree snail which are not currently in public ownership shall be designated as priority acquisition sites for conservation purposes.

Acquisition shall be considered through the Monroe County Natural Heritage and Park Program. (See Future Land Use Objective 102.4 and related objectives and policies). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Objective 207.12**

Monroe County shall implement activities to protect the habitat of, and to prohibit the destruction of, the federally-designated eastern indigo snake (*Drymachron corais couperi*), Key Largo wood rat (*Neotoma floridana smalli*), silver rice rat (*Orzomys argentatus*), Key Largo cotton mouse (*Peromyscus gossypinus allapaticola*), and the Lower Keys marsh rabbit (*Sylvilagus palustris hefneri*). [9J-5.012(3)(b)1; 9J-5.013(2)(b)6]

**Policy 207.12.1**

By January 4, 1998, Monroe County, in cooperation with the FWS and FGFWFC, shall identify wetland and native upland habitats which are documented habitat for the following:

1. eastern indigo snake (*Drymachron corais couperi*) (sites from No Name Key to Sugarloaf Key, on Big Torch Key, Middle Torch Key, Big Pine Key and Plantation Key);
2. silver rice rat (*Orzomys argentatus*) (sites on Cudjoe, Summerland, Big Torch, Middle Torch, Saddlebunch, Little Pine, Raccoon, Water, and Johnson Keys);
3. Lower Keys marsh rabbit (*Sylvilagus palustris hefneri*) (sites on Sugarloaf, Welles, Annette, Boca Chica, Big Pine and Hopkins Keys);
4. Key Largo wood rat (*Neotoma floridana smalli*) (on Key Largo);
5. Key Largo cotton mouse (*Peromyscus gossypinus allapaticola*) (on Key Largo); and
6. American crocodile (*Crocodylus acutus*). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.12.2**

By January 4, 1998, sites identified pursuant to Policy 207.12.1 shall be identified as priority acquisition sites for conservation purposes. Particular emphasis shall be placed upon acquisition of identified wetland and native upland sites which are located within Improved Subdivisions.

Acquisition shall be considered through the Monroe County Natural Heritage and Park Program. (See Future Land Use Objective 102.4 and related objectives and policies). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.12.3**

Upon adoption of the Comprehensive Plan, Monroe County shall implement the Permit Allocation and Point System. Monroe County shall assign a negative point rating to developments proposed within hammocks (identified pursuant to Policy 207.12.1) used by the Key Largo wood rat (*Orzomys argentatus*) and the Key Largo cotton mouse (*Peromyscus gossypinus allapaticola*). (See Policy 101.5.4). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.12.4**

By January 4, 1998, the Monroe County Biologist shall coordinate with FGFWFC to identify specific measures which could be implemented by the County to better protect the eastern indigo snake from illegal collection for the pet trade. The Environmental Crimes Task Force shall be responsible for implementing identified measures. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.12.5**

By January 4, 1997, Monroe County shall adopt revisions to the Land Development Regulations which shall establish the open space requirement for undisturbed salt marsh and buttonwood wetlands at one hundred (100) percent. (See Policy 204.2.1). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.12.6**

Upon completion of the Comprehensive Plan, the existing Habitat Evaluation Index (HEI), found in Section 9.5-336 through 9.5-342 of the Land Development Regulations (Monroe County BOCC, 1990), and which is adopted by reference in this Comprehensive Plan, shall be revised to better protect high quality upland vegetative communities and threatened and endangered species. The HEI shall be revised to include, at a minimum, the following:

1. a written methodology for completing the HEI;
2. requirements for integrating data regarding the historic sightings of rare and endangered species and critical nesting/feeding areas for birds; and
3. evaluation criteria which will better differentiate high, medium and low quality habitat.

Before adoption, the revisions shall undergo scientific peer review by experts in terrestrial and wildlife ecology. To the extent possible, the reviewers shall include those individuals who participated in development of the existing HEI methodology. (See Policy 205.2.1). [9J-5.013(2)(c)3]

**Policy 207.12.7**

Monroe County shall monitor FKAA compliance with federal regulations prohibiting potable water hookups to designated habitat areas of the Key Largo cotton mouse, Key Largo wood rat, and eastern indigo snake (pursuant to FKAA Rules Chapter 48-7). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.12.8**

By January 4, 1998, the Monroe County Biologist shall coordinate with the FWS and FGFWFC to determine the protection and habitat preservation measures which could be implemented by Monroe County to assist with recovery of these designated species. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Objective 207.13**

Monroe County shall implement activities to protect the habitat of, and to prohibit the destruction of, the federally-designated American alligator (*Alligator mississippiensis*). [9J-5.012(3)(a); 9J-5.013(2)(a)]

**Policy 207.13.1**

By January 4, 1997, Monroe County shall adopt revisions to the Land Development Regulations which shall continue to establish the open space requirement for freshwater ponds and freshwater wetlands at one-hundred (100) percent (Monroe County BOCC, 1990). (See Policy 204.2.1) [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.13.2**

By January 4, 1998, Monroe County shall meet with the FWS, DNR and SFWMD to determine how Monroe County can support acquisition of freshwater wetlands and critical recharge areas in the Lower Keys by FWS, DNR, and SFWMD. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.13.3**

By January 4, 1998, Monroe County shall identify additional privately-owned lands with freshwater wetlands (not within the acquisition areas of the FWS, DNR or SFWMD) which provide important alligator habitat as priority acquisition sites for conservation purposes.

Acquisition shall be considered through the Monroe County Natural Heritage and Park Program. (See Future Land Use Objective 102.4 and related policies). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**Policy 207.13.4**

By January 4, 1998, Monroe County shall identify the freshwater lens systems and associated recharge areas on Big Pine Key and adjacent keys. Special measures shall be implemented to protect the quantity and quality of groundwater recharge to the freshwater lenses. (See Natural Groundwater Aquifer Recharge Element Objective 1101.2 and related policies). [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

**GOAL 208**

Monroe County shall protect, conserve and appropriately use its soil and mineral resources. [9J-5.012(3)(a); 9J-5.013(2)(a)]

**Objective 208.1**

By January 4, 1997, Monroe County shall develop and implement a soil erosion and sedimentation control program. (see Objective 202.10 and related policies). [9J-5.013(2)(b)3]

**Objective 208.2**

By January 4, 1997, Monroe County shall adopt revisions to the Land Development Regulations which establish additional health, safety and environmental protection standards for the extraction or use of mineral resources. [9J-5.013(2)(b)3]

**Policy 208.2.1**

New mining activities and expansions to existing mining operations shall be prohibited. Existing mining operations may continue in accordance with the specific limitations of their current permits. All existing mining operations shall be required to utilize methods to prevent permanent groundwater and surface water contamination during mining operations. These shall include but not be limited to the following:

1. the first flush of runoff from the mining site shall be retained on-site;
2. turbidity controls shall be used to prevent contamination of adjacent off-site surface waters; and
3. all point sources of pollution shall be reduced in accordance with applicable regulations of the Department of Environmental Regulation and the U.S. Army Corps of Engineers.

When an application for annual permit for existing mining operations is proposed, the requirement for groundwater and surface water quality protection measures shall be attached as permit conditions.

Monitoring shall be required to determine compliance with state water quality standards. In the event that water quality standards are violated as a result of a mining operation, the mining activity shall be stopped.

**Policy 208.2.2**

Measures shall be utilized to decrease air quality impacts of existing mining operations.

**Policy 208.2.3**

Proper precautions shall be taken to prevent adverse effects from blasting within two (2) miles of areas with concentrations of development of more than one unit per acre. [9J-5.013(2)(c)2]

**Policy 208.2.4**

Resource extraction activities shall not involve extraction below sixty (60) feet. [9J-5.013(2)(c)2]

**Policy 208.2.5**

Monroe County shall develop and implement local reclamation standards which shall be at least as stringent as the criteria and standards contained in F.S. 1989, Chapter 378, Part IV. These standards shall be reviewed and revised in cooperation with DNR (Bureau of Mine Reclamation) and DER. [9J-5.013(2)(c)2]

**Policy 208.2.6**

As a condition of renewal for annual operating permits, existing resource extraction operators shall submit the following plans:

1. stormwater management plan;
2. soil erosion and sedimentation control plan;
3. fugitive dust control plan;
4. reclamation plan (consistent with standards adopted pursuant to Policy 208.2.5);
5. survey information documenting maximum depth of excavation and;

a risk analysis and mandatory pre-blasting survey shall be conducted for every structure within a scaled distance of 150 feet as defined in the Monroe County Blasting and Explosives Ordinance.

**Policy 208.2.7**

Monroe County shall periodically inspect permitted sites to verify compliance with provisions of the control plans and reclamation plan upon which the annual operating permit is conditioned. [9J-5.013(2)(c)2]

**Policy 208.2.8**

Applicants for annual permit renewal of existing mining operations shall have a reclamation plan approved by Monroe County.

**Policy 208.2.9**

No permit renewals shall be issued for non-conforming uses within zoning districts.

**Policy 208.2.10**

Oil and gas exploration, extraction and production in Monroe County shall be prohibited. Monroe County will also oppose oil, gas and mineral exploration, extraction and production in the Florida Keys National Marine Sanctuary.

**Objective 208.3**

By January 4, 1998, Monroe County shall revise the Land Development Regulations to protect fresh groundwater lenses from accelerated saltwater intrusion due to limestone mining activity. [9J-5.013(2)(b)3]

**Policy 208.3.1**

Monroe County shall map the aerial extent and depth of fresh groundwater resources (see Natural Groundwater and Aquifer Recharge Objective 1101.2 and related policies). [9J-5.013(2)(c)2]

**Policy 208.3.2**

Monroe County shall propose and adopt regulations to protect fresh groundwater resources from the impacts of limestone mining, including:

1. prohibition of limestone mining within or adjacent to any seasonal or permanent freshwater lens or lens recharge area; and/or
2. restoration requirements which promote preservation of freshwater lens integrity.

**Objective 208.4**

By January 4, 1998, Monroe County shall prepare an inventory of abandoned mining sites and develop a plan for the cleanup and productive reuse of abandoned mining sites. [9J-5.013(2)(b)3]

**Policy 208.4.1**

Monroe County shall work cooperatively with DER and DNR to identify alternatives for adaptive reuse and reclamation of abandoned mining pits in the Florida Keys. [9J-5.013(2)(c)2]

**Policy 208.4.2**

Monroe County shall inventory abandoned mining pits in the Florida Keys. The inventory shall include, at a minimum, the location, ownership, parcel size, general assessment of remaining resource potential, general description of existing site conditions, and environmental problems for each abandoned pit. [9J-5.013(2)(c)2]

**Policy 208.4.3**

Monroe County shall develop a strategy for encouraging reclamation and reuse of abandoned mining sites. [9J-5.013(2)(c)2]

**Policy 208.4.4**

Monroe County shall work with owners of abandoned mines to implement strategies for reclamation and reuse of abandoned mining sites. [9J-5.013(2)(c)2]

## **GOAL 209**

Monroe County shall discourage private land uses on its mainland, offshore islands and undeveloped coastal barriers, and shall protect existing conservation lands from adverse impacts associated with private land uses on adjoining lands. [9J-5.012(3)(a); 9J-5.013(2)(a)]

### **Objective 209.1**

Development of the mainland area of Monroe County shall be controlled so as to reduce public expenditures and to preserve the wilderness state of the area, as defined under the Wilderness Act. (See Future Land Use Objective 102.6 and related policies.) [9J-5.013(3)(b)1]

### **Objective 209.2**

Monroe County shall regulate land use activities on the islands in the surrounding waters of Florida Bay, Hawk Channel, and other waters within the legal boundaries of Monroe County. [9J-5.012(3)(c)1; 9J-5.013(2)(c)5 and 6]

### **Objective 209.3**

Monroe County shall take immediate actions to discourage private development in areas designated as units of the Coastal Barrier Resources System (CBRS). (See Future Land Use Objective 102.8 and related policies.) [9J-5.012(3)(b)1]

### **Objective 209.4**

By January 4, 1998, Monroe County shall complete and implement a cooperative land management program for private and county-owned lands located within and adjacent to parks and conservation lands which are owned by the state and federal governments in the Florida Keys. (See Future Land Use Objective 102.9 and related policies.) [9J-5.012(2)(c)7; 9J-5.014(3)(b)1 and 4]

## **GOAL 210**

Monroe County shall restore, where practicable, disrupted marine, wetland, beach/berm, and native upland vegetation systems on County-owned public lands. [9J-5.012(3)(a); 9J-5.013(2)(a)]

### **Objective 210.1**

By January 4, 1998, Monroe County shall initiate a program to restore and maintain disrupted marine, wetland, beach/berm and native upland vegetation systems on Monroe County public lands.

#### **Policy 210.1.1**

Priority wetland restoration sites shall be drafted and updated every other year. This list shall be developed by Monroe County in consultation with representatives of the ACOE, EPA, FWS, DER, DNR and FGFWFC. Priority wetland restoration sites shall be those disturbed wetlands having the greatest functional value as determined in the Florida Keys Advance Identification of Wetlands Program. [9J-5.012(3)(c)2; 9J-5.013(2)(c)6]

#### **Policy 210.1.2**

A list of priority native upland vegetation restoration sites shall be drafted and updated every other year. This list shall be developed by Monroe County in consultation with the Florida Department of Agriculture and Consumer Services (Division of Plant Industries), the Florida Natural Areas Inventory, and the National Audubon Society Research Department. Priority upland restoration sites shall be identified on the basis of findings of the general evaluation of upland vegetation (see Objective 205.1 and related policies). Priority sites shall be those disturbed areas whose restoration will result in the greatest habitat benefit at the least cost. Candidate restoration sites shall include publicly-owned as well as privately-owned sites. [9J-5.013(2)(c)3]

**Policy 210.1.3**

A list of priority seagrass bed restoration sites shall be drafted and updated every other year. This list shall be developed by Monroe County in consultation with NOAA, EPA, DNR, and DER. Priority sites shall reflect findings of the Management Plan for the Florida Keys National Marine Sanctuary. [9J-5.012(3)(c)2]

**Policy 210.1.4**

A program shall be developed and updated every other year for removing invasive exotic vegetation from existing county-owned lands (exclusive of trade lands owned by the Monroe County Land Authority), including plans for re-vegetation. (See Open Space and Recreation Objective 1201.11 and related policies). [9J-5.012(3)(c)2]

**Policy 210.1.5**

A program shall be developed and updated every other year for restoring county-owned beach/berm areas. (See Recreation and Open Space Objective 1201.11 and related policies). [9J-5.012(3)(b)4; 9J-5.013(2)(c)6]

**Policy 210.1.6**

A list shall be developed and updated every other year which selects from the identified priority wetland, seagrass and upland vegetation mitigation and restoration sites, those which shall be implemented in the following two years. Monroe County shall develop this plan working cooperatively with agencies of the federal and state government owning lands in the Florida Keys, and with appropriate federal and state regulatory agencies. [9J-5.013(2)(c)7]

**Policy 210.1.7**

Restoration projects shall be completed as funding becomes available. Local, state and federal funding sources shall be used to support restoration projects. [9J-5.013(2)(c)7]

**Policy 210.1.8**

A restoration fund shall be established. This fund shall consist of moneys paid, according to a designated fee structure, in lieu of tree relocation or replacement (pursuant to Policy 205.2.8). The fund shall be used to purchase trees for county restoration projects on upland sites. [9J-5.013(2)(c)7]

**Policy 210.1.9**

Monroe County shall support the efforts of state and federal agencies and private groups that buy land for conservation purposes to remove invasive exotic vegetation from



acquisition sites, including both publicly-owned and privately-owned lands. [9J-5.012(3)(c)2]

## **GOAL 211**

Monroe County shall conserve and protect potable water resources and cooperate with regional efforts to ensure the continued availability of quality potable water. [9J-5.011(2)(a); 9J-5.013(2)(a)]

### **Objective 211.1**

Monroe County shall work cooperatively with Dade County to encourage land use planning and development controls which shall protect the recharge area of the Florida City Wellfield from potential sources of groundwater contamination and saltwater intrusion. (See Potable Water Objective 701.4 and related policies). [9J-5.013(2)(b)2]

### **Objective 211.2**

Monroe County shall continue to assist the FKAA with water conservation efforts and to assist in implementing the FKAA's Water Conservation Plan, consistent with SFWMD's Water Shortage Plan and Water Consumption Guidelines, and shall implement measures to further conserve potable water. (See Potable Water Objective 701.9 and related policies). [9J-5.013(2)(b)2]

### **Objective 211.3**

By January 4, 1998, Monroe County shall identify the freshwater lens system and associated recharge areas of the Florida Keys and shall implement programs regulating the storage and use of hazardous materials in recharge areas, prohibiting new water withdrawals, and phasing out existing water withdrawals to protect against saltwater intrusion. (See Natural Groundwater Aquifer Recharge Objectives 1101.2 and 1101.3 and related policies). [9J-5.013(2)(b)2]

## **GOAL 212**

Monroe County shall prioritize shoreline land uses and establish criteria for shoreline development in order to preserve and enhance coastal resources and to ensure the continued economic viability of the County. [9J-5.012(3)(a); 9J-5.013(2)(a)]

### **Objective 212.1**

By January 4, 1998, Monroe County shall develop and implement measures for regulating shoreline uses consistent with the following order of priorities:

- a) water-dependent uses;
- b) water-related uses; and
- c) uses that are not dependent upon or related to shoreline access. [9J-5.012(3)(b)3]

**Policy 212.1.1**

By January 4, 1998, Monroe County shall develop a Shoreline Use Priorities Plan which shall provide for siting of water-dependent and water-related uses consistent with the following order of priority: 1) water-dependent uses, 2) water-related uses, and 3) uses that are not dependent upon or related to shoreline access. The plan shall accomplish the following:

1. establish performance standards for shoreline development, consistent with criteria for marina siting (see Objective 212.4 and related policies);
2. identify environmentally suitable waterfront areas and recommend strategies for reserving such areas for water-dependent and water-related development sites consistent with estimated need;
3. analyze conflicts among existing shoreline uses and recommend strategies for reducing or eliminating such conflicts; and
4. identify strategies for encouraging appropriate mixed use development that includes water-dependent and water-related uses and is compatible with existing land uses. [9J-5.012(3)(c)8]

**Policy 212.1.2**

By January 4, 1998, Monroe County shall:

1. adopt an amendment to the Comprehensive Plan which incorporates recommendations of the Shoreline Use Priorities Plan; and
2. adopt Land Development Regulations which regulate existing and new shoreline development consistent with the recommendations of the Shoreline Use Priorities Plan. [9J-5.012(3)(c)8]

**Policy 212.1.3**

Monroe County shall maintain existing commercial fishing operations as conforming uses. [9J-5.012(3)(c)8]

**Objective 212.2**

Monroe County shall adopt minimum performance standards designed to reduce the stormwater runoff impacts, aesthetic impacts, and hydrologic impacts of shoreline development.

**Policy 212.2.1**

Minimum coastal construction setbacks currently in use in Monroe County shall be reviewed in coordination with DNR and FGFWFC. Setbacks shall be identified which will accomplish the following:

1. protect natural shoreline vegetation;
2. protect marine turtle nesting beaches;

3. protect water quality (through assimilative and filtrative uptake of pollutants by protected natural shoreline vegetation);
4. protect structures from the effects of long-term sea level rise;
5. protect beaches and shorelines from erosion; and
6. protect the character and overwater views of the community.

Existing setbacks in the Land Development Regulations (Monroe County BOCC, 1990) shall be revised as deemed appropriate based upon findings of this review. The setbacks currently in use shall be the minimum and shall not be relaxed. Existing setbacks in the Land Development Regulations are summarized as follows:

1. twenty (20) feet from the mean high tide line of manmade water bodies and/or lawfully altered shorelines of natural water bodies;
2. fifty (50) feet from natural water bodies with unaltered shorelines or unlawfully altered shorelines, measured from the landward limit of mangroves, if any, and where mangroves do not exist, from the mean high tide line; and
3. fifty (50) feet from any shoreline area which is known to serve as an active nesting or resting area for marine turtles, crocodiles, terns, gulls and other birds. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

#### **Policy 212.2.2**

Definitions for the terms "altered shoreline" and "unaltered shoreline" shall be adopted concurrent with this comprehensive plan and shall be written to recognize the following general features of each:

1. altered shorelines are generally located directly along dredged canals, basins and channels and/or have been filled or vertically bulkheaded to such a degree that the original natural slope landward of the water is no longer present.
2. unaltered shorelines are generally located along natural non-dredged waterways and open water and have a sloping profile typical of the original natural conditions of the shoreline even though fill or riprap may be present.



**Policy 212.2.3**

Permitted uses and performance standards within the shoreline setback shall be as follows:

Principal structures shall be set back as follows:

1. Along lawfully altered shorelines including manmade canals, channels, and basins, principal structures shall be set back at least twenty (20) feet as measured from the mean high water (MHW) line;
2. Along open water shorelines not adjacent to manmade canals, channels, or basins, and which have been altered by the legal placement of fill:
  - a. Where a mangrove fringe of at least ten (10) feet in width occurs across the entire shoreline of the property, principal structures shall be set back at least thirty (30) feet as measured from the mean high water (MHW) line or the landward extent of the mangroves, whichever is further inland.
  - b. Where no mangrove fringe exists, principal structures shall be set back at least thirty (30) feet from the mean high water (MHW) line, provided that native vegetation exists or is planted and maintained in a ten (10) foot width across the entire shoreline as approved by the County Biologist, and is placed under conservation easement; otherwise the setback shall be fifty (50) feet as measured from the mean high water (MHW) line.
  - c. On infill lots surrounded by significant development where principal structures are set back less than fifty (50) feet from mean high water (MHW) or the landward extent of mangroves, the Director of Planning and Environmental Resources may evaluate the community character, the presence or absence of environmental features, and the setbacks on adjacent developed properties within two parcels on either side of proposed development, and may allow principal structures to be set back as far as practicable or in line with adjacent principal structures. In no event shall the setback be less than twenty (20) feet. On shorelines where the existing pattern of setback is greater than thirty (30) feet, the greater setback shall apply.
3. Along unaltered and unlawfully altered shorelines, principal structures shall be set back fifty (50) feet as measured from the mean high water (MHW) line or the landward extent of the mangroves, whichever is further landward;

Accessory structures within the shoreline setback shall be designed to meet the following criteria:

1. Along altered shorelines, including manmade canals, channels, and basins:
  - a. In no event shall the total, combined area of all structures occupy more than sixty (60) percent of the upland area of the shoreline setback ;
  - b. Pools and spas shall be set back a minimum of ten (10) feet, as measured from the mean high water (MHW) line;

2. Along open water shorelines which have been altered by the legal placement of fill, and where a mangrove fringe of at least ten (10) feet in width occurs across the entire shoreline of the property:
  - a. In no event shall the total, combined area of all structures occupy more than thirty (30) percent of the upland area of the shoreline setback;
  - b. Accessory structures other than docks and erosion control structures shall be set back a minimum of fifteen (15) feet, as measured from the mean high water (MHW) line or the landward extent of the mangroves, whichever is further landward;
3. Along unaltered shorelines:
  - a. In no event shall the total, combined area of all structures occupy more than thirty (30) percent of the upland area of the shoreline setback;
  - b. Accessory structures other than docks and erosion control structures shall be set back a minimum of twenty-five (25) feet, as measured from the mean high water (MHW) line or the landward extent of the mangroves, whichever is further landward;
4. Any proposed development within the shoreline setback shall include a site-suitable stormwater management plan for the entire developed parcel which meets the requirements of the Land Development Regulations;
5. All structures within the shoreline setback shall be located such that the open space ratios for the entire parcel and all scenic corridors and bufferyards are maintained;
6. Structures shall be located in existing cleared areas before encroaching into native vegetation. The remaining upland area of the shoreline setback shall be maintained as native vegetation or landscaped areas that allow infiltration of stormwater runoff;
7. Side yard setbacks must be maintained for all structures in the shoreline setback except for docks, sea walls, fences, retaining walls, and boat shelters over existing boat ramps;
8. No enclosed structures, other than a dock box of five (5) feet in height or less, shall be allowed within the shoreline setback. Non-enclosed gazebos must be detached from any principal structure on the parcel. No decks or habitable spaces may be constructed on the roof of any non-enclosed gazebo in the shoreline setback;
9. Pools, spas, fish cleaning tables, and similar pollutant sources may not discharge directly into surface waters. Where no runoff control structures are present, berms and vegetation shall be used to control runoff. Native vegetation shall not be removed to install berms or runoff control structures;

10. All boat ramps shall be confined to existing scarified shoreline areas of manmade canals, channels, and basins with little or no native vegetation, and shall be located and designed so as not to create a nonconformity for other structures set back from the new mean high water (MHW) line created by the boat ramp; and
11. The roof and supporting members of a boat shelter constructed in compliance with Section 9.5-345 of the Land Development Regulations, as amended (hereby incorporated by reference), may extend two (2) feet into the shoreline setback around the perimeter of a boat basin or ramp. This area shall be subtracted from the total area allowed for all structures within the shoreline setback.
12. Shoreline structures shall be designed to protect tidal flushing and circulation patterns. Any project that may produce changes in circulation patterns shall be approved only after sufficient hydrographic information is available to allow an accurate evaluation of the possible impacts of the project. Previously existing manmade alterations shall be evaluated so as to determine whether more hydrological benefits will accrue through their removal as part of the project.
13. No development other than pile supported docks and walkways designed to minimize adverse impacts on marine turtles shall be allowed within fifty (50) feet of any portion of any beach berm complex which is known to serve as a nesting area for marine turtles:
  - a. The fifty (50) foot setback shall be measured from either the landward toe of the most landward beach berm or from fifty (50) feet landward of MHW, whichever is less. The maximum total setback will be one hundred (100) feet from MHW.
  - b. Structures designed to minimize adverse impacts on marine turtles shall have a minimum horizontal distance of four (4) feet between pilings or other upright members and a minimum clearance of two (2) feet above grade. The entire structure must be designed to allow crawling turtles to pass underneath it moving only in a forward direction. Stairs or ramps with less than the minimum two (2) feet clearance above grade are discouraged. If built, these portions of the structure shall be enclosed with vertical or horizontal barriers no more than two (2) inches apart, to prevent the entrapment of crawling turtles.
  - c. Beaches known to serve as nesting areas for marine turtles are those areas documented as such on the County's threatened and endangered species maps and any areas for which nesting or nesting attempts ("crawls") have been otherwise documented. Within mapped nesting areas, the Director of Planning and Environmental Resources may, in cooperation with the Florida Department of Environmental Protection, determine that specific segments of shoreline have been previously, lawfully altered to such a degree that suitable nesting habitat for marine turtles is no longer present. In such cases, the Director may recommend reasonable measures to restore the nesting habitat. If such measures are not feasible, the Director will waive the setback requirements of this paragraph. Restoration of suitable nesting habitat may be required for unlawfully altered beaches.

14. Special Approvals:

- a. For structures serving commercial uses, public uses, or more than three dwelling units, the Planning Commission may approve deviations from the above standards as a major or minor conditional use. Such approval may include additional structures or uses provided that such approval is consistent with any permitted uses, densities, and intensities of the land use district, furthers the purposes of this section, is consistent with the general standards applicable to all uses, and the proposed structures are located in a disturbed area of an altered shoreline. Such additional uses are limited to waterfront dining areas, pedestrian walkways, public monuments or statues, informational kiosks, fuel or septic facilities, and water-dependent marina uses. Any such development shall make adequate provision for a water quality monitoring program for a period of five (5) years after the completion of the development.
- b. For structures serving three or fewer dwelling units, the Director of Planning and Environmental Resources may approve designs that address unique circumstances such as odd shaped lots, even if such designs are inconsistent with the above standards. Such approval may be granted only upon the Director's written concurrence with the applicant's written finding that the proposed design furthers the purpose of this section and the goals of the Monroe County Comprehensive Plan. Only the minimum possible deviation from the above standards will be allowed in order to address the unique circumstances. No such special approval will be available for after-the-fact permits submitted to remedy a Code Enforcement violation.
- c. All structures lawfully existing within the shoreline setback along manmade canals, channels, or basins, or serving three or fewer dwelling units on any shoreline, may be rebuilt in the same footprint provided that there will be no adverse impacts on stormwater runoff or navigation.
- d. Docks or docking facilities lawfully existing along the shoreline of manmade canals, channels, or basins, or serving three or fewer dwelling units on any shoreline, may be expanded or extended beyond the size limitations contained in this section in order to reach the water depths specified for docking facilities in Policy 212.5.2. Any dock or docking facility so enlarged must comply with each and every other requirement of this Policy and Section 9.5-345 of the Land Development Regulations, as amended (hereby incorporated by reference).



**Policy 212.2.4**

Stormwater management criteria applicable to the shoreline setbacks shall encourage Best Management Practices (BMPs) which utilize natural berms and vegetation to control runoff from waterfront property. Berms shall not be installed where shoreline vegetation is present. Where berms are used along artificial waterways, they shall be raised so that there is a gradual slope away from the canal edge. In any case, all stormwater management criteria shall conform to adopted level of service standards for water quality and quantity (see Drainage Element Objective 1001.1 and related policies).

**Objective 212.3**

By January 4, 1998, Monroe County shall develop and implement siting and discharge regulations, fee requirements and enforcement provisions pertaining to moored/anchored vessels (live-aboards) in nearshore waters. (See Objective 202.4 and related policies.) [9J-5.012(3)(b)1,2 and 3; 9J-5.013(2)(b)2]

**Objective 212.4**

By January 4, 1998, Monroe County shall complete an analysis of the need for additional marina facilities and shall develop criteria for marina siting which shall meet or exceed state standards. [9J-5.012(3)(b)1,2 and 3; 9J-5.013(2)(b)2]

**Policy 212.4.1**

New marinas having three (3) or more slips shall be prohibited until:

1. a marina survey is completed; and
2. marina siting criteria are adopted by Monroe County and approved by DER, DNR and ACOE. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 212.4.2**

Monroe County shall complete a survey of all existing recreational and commercial marinas. Such survey shall include, at a minimum:

1. number of wet and dry slips;
2. usage rates of wet and dry slips;
3. breakout of slips by boat size;
4. on-site amenities including the number of parking spaces;
5. surrounding uses and any known or potential compatibility problems;
6. availability for public use (recreational marinas only);
7. number of boat ramps provided and the boat lanes for each ramp;
8. condition of facilities;
9. existing DER-accepted documentation of water quality trends;
10. availability of pump-out facilities; and
11. potential for marina expansion according to siting criteria (see Policy 212.4.3). [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 212.4.3**

Monroe County shall develop and adopt marina siting criteria. In general, marinas shall be located in areas where maximum physical advantages exist and where no unreasonable or excessive impacts are foreseen on marine resources. Marina construction shall not involve destruction of any significant marine wetlands or seagrass beds.

Specific criteria for marina siting shall be developed consistent with DER Rule 17-312, F.A.C., DNR Rule 18-21.004 F.A.C., and regulations of ACOE. They shall reflect consideration of the following:

1. benthic vegetation and faunal assemblages;
2. adequacy of circulation and tidal flushing;
3. access to deep water through existing channels of adequate depth (see Policy 212.5.2);
4. minimal shoreline modification necessary;

5. quality and size of upland areas and degree of alteration necessary;
6. ability to restore and enhance marina resource values at sites subject to past alteration;
7. location of propeller dredging problem areas; and
8. impact of boats on crocodiles, manatees, and turtles. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 212.4.4**

Applicants for development approval of marinas with three (3) or more slips shall meet the following:

1. Monroe County's marina siting criteria (see Policy 212.4.3);
2. Monroe County's dock siting criteria (see Objective 212.5 and related policies); and
3. criteria of Rule 17-312 Part IV and Rule 18-21.004, F.A.C. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 212.4.5**

Applicants for development approval of docking facilities for fewer than three (3) slips shall meet the following criteria:

1. Monroe County's dock siting criteria (see Objective 212.5 and related policies); and
2. criteria of Rule 17-312 Part IV and Rule 18-21.004, F.A.C. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 212.4.6**

Siting of new marinas with three (3) or more slips shall be prohibited until full utilization of existing marinas has occurred within a five (5) mile radius of a proposed new marina site. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 212.4.7**

Applicants for a permit to develop a new marina facility shall obtain necessary permits from all applicable state and federal regulatory agencies prior to issuance of a County permit. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Objective 212.5**

By January 4, 1997, Monroe County shall adopt revisions to the Land Development Regulations pertaining to mooring fields and structures built over water (including, but not limited to, boat docks, fishing piers, swimming piers and observation decks). [9J-5.012(3)(b)1,2 and 3; 9J-5.013(2)(b)2]

**Policy 212.5.1**

Monroe County shall support state policies and regulations concerning the permitting of marinas, docks and piers, except in those instances where more stringent regulations

adopted by Monroe County shall be maintained. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 212.5.2**

Except as provided herein, siting of single family docks, boat ramps, and boat slips on manmade water bodies shall require minus four (-4) feet mean low water (MLW) depths at the terminal end. These structures must have continuous access to open water at depths of minus four (-4) feet (MLW) or greater over a channel width of twenty (20) feet, or access to open water via a marked, federally and state approved navigation channel.

1. Docking facilities may be developed on any shoreline if there is a mean low water (MLW) depth of at least minus four (-4) feet at the terminal end of the docking facility, and continuous access to open water, or
2. Docking facilities may be developed on the shoreline of lots in a subdivision if the docking facility is located in a channel or canal or basin that connects five or more contiguous lots which was dredged before 1986, and if there is a mean low water (MLW) depth of at least minus four (-4) feet at the terminal end of the docking facility.

For purposes of this policy “open water” means the portion of the straits of Florida, Florida Bay, the Gulf of Mexico, or the Atlantic Ocean which consists of an uninterrupted expanse of water deeper than four (4) feet at mean low water (MLW) and “continuous access” means a natural passage or an existing manmade channel no shallower than four (4) feet at mean low water (MLW) and no narrower than twenty (20) feet.

**Policy 212.5.3**

The minimum water depth requirement at the mooring site shall be minus four (-4) feet mean low water. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**Policy 212.5.4**

The following restrictions shall apply to all structures built over or adjacent to water (including but not limited to boat docks, fishing piers, swimming piers and observation decks):

1. the maximum permitted length of docks shall be commensurate with the shoreline width of the land parcel at which the dock is located, subject to a maximum length of 100 feet from the mean low water line;
2. the length of docks shall not exceed ten (10) percent of the width of the waterbody as measured laterally across the waterbody from the proposed location of placement and from the point of mean low water to the opposing point of mean low water (exception to this shall be made in cases where adequate depth at the terminal end of the dock pursuant to Policies 212.5.2 and 212.5.3 is not available; in such cases the dock may be shortened only enough to allow the centerline of an average width vessel to lie in four feet of water at mean low water);

3. no dock together with a moored boat shall preempt more than twenty-five (25) percent of the navigable portion of a man-made waterbody. This should allow for a structure built over water on either side of the waterbody to have a moored boat and room for free passage of two boats down the center of the waterbody;
4. all fishing, swimming, and other piers and observation decks shall conform to design criteria to be adopted in the Land Development Regulations which prohibit their use as a dock.

A variance procedure, separate from that set forth in the current Land Development Regulations Section 9.5-523, shall be included in the Land Development Regulations to allow the minimum relaxation of the above restrictions which is necessary to provide the upland owner reasonable access to adjacent waters for recreational use. That variance procedure shall incorporate, among other criteria, requirements that such structures not be inconsistent with community character, not interfere with public recreational uses in or on adjacent waters, and pose no navigational or safety hazard.

#### **Policy 212.5.5**

Upon adoption of the Comprehensive Plan, Monroe County shall prohibit the location of mooring sites over submerged land which is vegetated with seagrasses or characterized by a hard-bottom community, regardless of water depth, except as may be permitted by the Florida Department of Environmental Protection. This prohibition shall also apply to mooring fields. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

#### **Policy 212.5.6**

Docking facilities and piers shall not terminate on submerged land which is vegetated with seagrasses or characterized by a hard-bottom community, regardless of water depth, except as may be permitted by the Florida Department of Environmental Protection. Design criteria to permit sunlight to reach the bottom shall be adopted. No boat shelters or gazebos shall extend over submerged lands vegetated with seagrasses or over hard-bottom communities.

#### **Policy 212.5.7**

Monroe County shall establish policies and regulations pertaining to mooring fields, which specifically address the following:

1. siting criteria;
2. requirements for supervision from on-shore facilities (including among other items, pump-out stations and wastewater treatment facilities); and
3. construction practices. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

#### **Policy 212.5.8**

Monroe County shall assist the DCA in developing a coordinated agency review pursuant to section 380.051, Florida Statutes. The Monroe County Growth Management Division shall continue to conduct meetings with the Department of Environmental Regulation, the National Oceanographic and Atmospheric Administration, the Department of Natural Resources, and the U.S. Army Corps of Engineers to identify the environmental issues and contradictions in rules and authorities related to the permitting process for marinas, docking facilities, piers, mooring sites, hardened vertical shoreline structures, and dredging in the Florida Keys. Within one year of the effective date of this comprehensive plan, after

issues have been identified, Monroe County shall revise the Land Development Regulations. (See Policies 103.2.13, 203.6.1, 212.4.7, and 212.6.5.) [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

#### **Objective 212.6**

By January 4, 1997, Monroe County shall adopt revisions to the Land Development Regulations pertaining to shoreline stabilization. [9J-5.012(3)(b)1,2 and 3; 9J-5.013(2)(b)2]

##### **Policy 212.6.1**

No new bulkheads, seawalls or other hardened vertical shoreline structures shall be permitted on open water. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

##### **Policy 212.6.2**

In lieu of bulkheads, seawalls or other hardened vertical shoreline structures, residential canals and altered shorelines shall be stabilized by maintaining native vegetation. When it can be demonstrated that native vegetation will not prevent erosion, then riprap or sloping rock revetments shall be permitted. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

##### **Policy 212.6.3**

Bulkheads, seawalls or other hardened vertical shoreline structures shall be permitted on residential canals and altered shorelines only in the following situations:

1. to replace an existing deteriorated bulkhead or seawall; or
2. to stabilize a severely eroding shoreline area. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

##### **Policy 212.6.4**

Shoreline structures shall be designed to protect tidal flushing and circulation patterns. Any project which may produce changes in circulation patterns shall be approved only after sufficient hydrographic information is available to allow an accurate evaluation of the possible impacts of the project. Previously existing manmade alterations shall be evaluated so as to determine whether more hydrological benefits will accrue through their removal as part of the project. [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

##### **Policy 212.6.5**

Monroe County shall assist the DCA in developing a coordinated agency review pursuant to section 380.051, Florida Statutes. The Monroe County Growth Management Division shall continue to conduct meetings with the Department of Environmental Regulation, the National Oceanographic and Atmospheric Administration, the Department of Natural Resources, and the U.S. Army Corps of Engineers to identify the environmental issues and contradictions in rules and authorities related to the permitting process for marinas, docking facilities, piers, mooring sites, hardened vertical shoreline structures, and dredging in the Florida Keys. Within one year of the effective date of this comprehensive plan, after issues have been identified, Monroe County shall revise the Land Development Regulations. (See Policies 103.2.13, 203.6.1, 212.4.7, and 212.5.10.) [9J-5.012(3)(c)1,2,3 and 8; 9J-5.013(2)(c)1 and 6]

**GOAL 213**

Monroe County shall ensure adequate public access to the beach or shoreline. [9J-5.012(3)(a); 9J-5.013(2)(a)]

**Objective 213.1**

Monroe County shall maintain and increase the amount of public access to the beach or shoreline consistent with the estimated public need and environmental constraints. [9J-5.012(3)(b)9]

**Policy 213.1.1**

By January 4, 1998, Monroe County shall complete a Public Access Plan for unincorporated Monroe County. The Public Access Plan shall estimate the existing capacity of and need for the following types of public access facilities:

1. public access points to the beach or shoreline through public lands;
2. public access points to the beach or shoreline through private lands;
3. parking facilities for beach or shoreline access;
4. coastal roads and facilities providing scenic overlooks;
5. marinas;
6. boat ramps;
7. public docks;
8. fishing piers; and
9. traditional shoreline fishing areas. [9J-5.012(3)(c)9]

**Policy 213.1.2**

By September 30, 1998, Monroe County shall adopt Land Development Regulations which:

1. implement recommendations of the Public Access Plan;
2. provide for the enforcement of public access to beaches renourished at public expense by prescription, prescriptive easement, or any other legal means;
3. provide for the enforcement of public access requirements of the Coastal Zone Protection Act of 1985;
4. specify standards for transportation and parking facilities for beach and shoreline access.

5. include environmental design criteria which reflect environmental constraints. [9J-5.012(3)(c)9]

**Policy 213.1.3**

Beginning in 1998, Monroe County shall maintain or replace physical public access to beaches and shorelines in accordance with provisions of the appropriate park master plans and current management plans for County-owned beaches. (See Recreation and Open Space Objectives 1201.3.7 and 1201.11 and related policies.) [9J-5.012(3)(c)9]

**Policy 213.1.4**

By January 4, 1998, Monroe County shall incorporate public access facilities into the GIS for use in future public access and shoreline planning. [9J-5.012(3)(c)9]

**GOAL 214**

Monroe County shall recognize, designate, protect, and preserve its historic resources. [9J-5.012(3)(a); 9J-5.013(2)(a)]

**Objective 214.1**

Monroe County shall establish and maintain a comprehensive inventory of historic and archaeological resources, including buildings, structures, districts, sites, objects, and significant places. (See Future Land Use Objective 104.1 and related policies). [9J-5.006(3)(b)4; 9J-5.012(3)(b)10]

**Objective 214.2**

Monroe County shall formally recognize significant historic and archaeological resources by nominating appropriate resources on the National Register and/or the Florida Keys Historic Register. (See Future Land Use Objective 104.2 and related policies). [9J-5.006(3)(b)4; 9J-5.012(3)(b)10]

**Objective 214.3**

Monroe County shall adopt and implement measures for the protection and preservation of historic resources. (See Future Land Use Objective 104.3 and related policies). [9J-5.006(3)(b)4; 9J-5.012(3)(b)10]

**Objective 214.4**

Monroe County shall adopt and implement measures for the protection and preservation of historic resources on public lands. (See Future Land Use Objective 104.4 and related policies). [9J-5.006(3)(b)4; 9J-5.012(3)(b)10]



**Objective 214.5**

Monroe County shall seek to increase public awareness and appreciation of the historic resources and historic preservation activities in the County. (See Future Land Use Objective 104.5 and related policies). [9J-5.006(3)(b)4; 9J-5.012(3)(b)10]

**Objective 214.6**

Monroe County shall coordinate with public agencies and non-profit organizations to protect, preserve and increase awareness of historic resources. (See Future Land Use Objective 104.6 and related policies). [9J-5.006(3)(b)4; 9J-5.012(3)(b)10]

**GOAL 215**

Monroe County shall provide the necessary services and infrastructure to support existing and new development proposed by the Future Land Use Element while limiting public expenditures which result in the loss of or adverse impacts to environmental resources in the Coastal Zone. [9J-5.012(3)(a); 9J-5.013(2)(a)]

**Objective 215.1**

Public expenditures for infrastructure in the Coastal Zone shall be phased in accordance with a capital improvements schedule to maintain the adopted level of service (LOS) standards established in the Comprehensive Plan. [9J-5.012(2)(b)11]

**Policy 215.1.1**

Monroe County shall adopt level of service standards (LOS) for the following public facility types required by Chapter 9J-5, F.A.C: roads, sanitary sewer, solid waste, drainage, potable water, parks and recreation, and mass transit. The LOS standards are established in the following sections of the Comprehensive Plan:

1. The LOS for roads is established in Traffic Circulation Policy 301.1.1;
2. The LOS for potable water is established in Potable Water Policy 701.1.1;
3. The LOS for solid waste is established in Solid Waste Policy 801.1.1;
4. The LOS for sanitary sewer is established in Sanitary Sewer Policy 901.1.1;
5. The LOS for drainage is established in Drainage Policy 1001.1.1; and
6. The LOS for parks and recreation is established in Recreation and Open Space Policy 1201.1.1.

**Policy 215.1.2**

By January 4, 1997, Monroe County shall adopt Land Development Regulations which provide a Concurrency Management System (see Capital Improvements Policy 1401.4.5). The Concurrency Management System shall ensure that no permits will be issued for new

development unless adequate public facilities needed to support the development at the adopted LOS standards are available concurrent with the impacts of development. [9J-5.012(3)(c)12]

**Policy 215.1.3**

By January 4, 1997, the Monroe County Capital Improvements Program shall be revised to include the infrastructure improvements identified in the Comprehensive Plan Five-Year Schedule of Capital Improvements which are required to serve development or redevelopment in the coastal area at the densities proposed by the Future Land Use Element, in accordance with the adopted LOS standards referenced in Policy 215.1.1. The Capital Improvements Program shall be monitored and updated annually to ensure that facilities and services are available concurrent with the impacts of development. Development approval may be phased to allow the provision of public facilities and services necessary to maintain the adopted levels of service. [9J-5.012(3)(c)12]

**Objective 215.2**

By January 4, 1997, Monroe County shall initiate programs which require exploration of feasible alternatives to funding of public facilities and infrastructure which will result in the loss of or damage to significant coastal or natural resources, including, but not limited to, wilderness areas, wildlife habitats, and natural vegetative communities. [9J-5.012(2)(b)11]

**Policy 215.2.1**

By January 4, 1997, Monroe County shall adopt Land Development Regulations which require consideration of feasible design and siting alternatives for new public facilities and infrastructure proposed within the coastal zone in order to minimize adverse impacts to natural resources. [9J-5.012(3)(c)1]

**Policy 215.2.2**

Monroe County shall limit public expenditure on the mainland to the repair and maintenance of existing public facilities and infrastructure. [9J-5.012(3)(c)9]

**Policy 215.2.3**

No public expenditures shall be made for new or expanded facilities in areas designated as units of the Coastal Barrier Resources System, saltmarsh and buttonwood wetlands, or offshore islands not currently accessible by road, with the exception of expenditures for conservation and parklands consistent with natural resource protection, and expenditures necessary for public health and safety. [9J-5.012(3)(c)1]

**GOAL 216**

Monroe County shall provide for hurricane evacuation, shelters and refuges, and communication capabilities to promote safeguarding of the public against the effects of hurricanes and tropical storms. [9J-5.012(3)(a); 9J-5.013(2)(a)]

**Objective 216.1**

Monroe County shall reduce hurricane evacuation clearance time to 24 hours by the year 2010. [9J-5.012(3)(b)7]

**Policy 216.1.1**

Within one year of the effective date of this plan, Monroe County shall adopt Land Development Regulations which establish a Permit Allocation System for new residential development. The Permit Allocation System shall limit the number of permits issued for new residential development to be consistent with the Future Land Use Element in order to maintain hurricane evacuation clearance times at a maximum of 24 hours (see Land Use Objective 101.2 and supporting policies). [9J-5.012(3)(c)4]

**Policy 216.1.2**

By January 4, 1997, Monroe County shall initiate an interlocal agreement with the cities of Key West, Key Colony Beach, and Layton. The agreement shall establish an entity comprised of representatives of the four jurisdictions which shall be responsible for:

1. allocating the relative proportions of future residential development within the four jurisdictions consistent with the Permit Allocation System;
2. establishing a system to monitor future development within the jurisdictions; and
3. mediating disputes between the jurisdictions regarding the allocation of future development.

Monroe County shall seek the assistance of the Florida Department of Community Affairs and/or the South Florida Regional Planning Council to ensure execution of the agreement by January 4, 1998 and subsequent compliance. [9J-5.012(3)(c)4]

**Policy 216.1.3**

During a hurricane evacuation, Monroe County shall designate US 1 and Card Sound Road after Card Sound Road improvements are completed as evacuation routes as directed by the Department of Emergency Management. [9J-5.012(3)(c)4]

**Policy 216.1.4**

Monroe County shall annually identify and establish staffing and equipment need priorities which are directly related to increasing efficiency during hurricane evacuation, including, but not limited to, communication systems, emergency coordination personnel, public education personnel, and development review personnel. Opportunities for fulfilling the deficiencies with reliable interagency support shall be identified and interlocal agreements initiated. [9J-5.012(3)(c)4]

**Policy 216.1.5**

As part of the 5-year Comprehensive Plan Evaluation and Appraisal Report process, Monroe County shall, in coordination with the South Florida Regional Planning Council and the municipalities of Key West, Layton, and Key Colony Beach, re-run updated transportation models of the Southeast Florida Hurricane Evacuation Study in order to re-evaluate and adjust such factors as participation rates, visitor population levels, total growth allocations, allocations to sub-areas and municipal jurisdictions and estimates of the effectiveness of programs and policies to reduce the number of evacuating vehicles.

No later than six months after the effective date of this comprehensive plan and as part of every Evaluation and Appraisal Report thereafter, Monroe County shall review and re-evaluate the key variables on which hurricane clearance times have been calculated, with the highest priority given to conducting surveys necessary to more accurately predict peak seasonal occupancy rates, behavioral response factors and related assumptions.

If data becomes available to indicate need for an adjustment of any factor such data shall, within one year of certification of such data, be used to re-run transportation models of the Southeast Florida Hurricane Evacuation Study. New clearance times produced by such additional runs of the Southeast Florida Hurricane Evacuation Study shall be incorporated by plan amendment. [9J-5.012(3)(c)4]

**Policy 216.1.6**

Monroe County shall seek an interlocal agreement with the National Oceanic and Atmospheric Administration (NOAA) for installation of at least four tide gauges at critical locations throughout the Keys in conjunction with the Florida Keys National Marine Sanctuary Program. The interlocal agreement shall address funding sources. [9J-5.012(3)(c)4]

**Policy 216.1.7**

Monroe County shall seek an interlocal agreement, with one or more appropriate agencies, to draft and implement a comprehensive program for expanded resident and visitor hurricane awareness and evacuation procedures. The program will identify education needs and adequate funding sources to include, at a minimum, staffing requirements, distribution of hurricane public awareness brochures, media coverage, and public announcements in English and Spanish. [9J-5.012(3)(c)4]

**Policy 216.1.8**

As directed by the Department of Emergency Management, Monroe County shall implement procedures for the orderly closing and evacuation of hotels, motels, RV parks, mobile home parks, campgrounds, and state and county parks in accordance with the Monroe County Hurricane Preparedness Evacuation and Shelter Plan. The County shall require that operators of transient facilities notify guests of the evacuation procedures during check-in throughout the hurricane season. The plan shall be monitored and updated on an annual basis. [9J-5.012(3)(c)4]

**Policy 216.1.9**

In accordance with the Monroe County Hurricane Preparedness Evacuation and Shelter Plan, special needs populations shall be identified by the Monroe County Department of Emergency Management. Monroe County shall implement the procedures contained in the Plan for the safe evacuation of these populations. [9J-5.012(3)(c)4]

**Policy 216.1.10**

By January 4, 1998, Monroe County shall coordinate with the Florida Department of Transportation to draft and implement a program which will establish priorities for elevation of low segments of US 1. The program shall, at a minimum, identify funding sources and scheduling. Priority consideration shall be given to elevation of the 18-mile stretch of US 1 northbound from Key Largo. [9J-5.012(3)(c)4]

**Policy 216.1.11**

By January 4, 1997, Monroe County shall adopt Land Development Regulations which require that all new and redeveloped marinas provide a hurricane contingency plan for review and approval before permits can be issued. [9J-5.012(3)(c)4]

**Policy 216.1.12**

Monroe County shall establish separate dedicated funds to accommodate future technological advances in hurricane analyses and communication systems for the Emergency Management and Emergency Communications Department. [9J-5.012(3)(c)4]

**Policy 216.1.13**

During a hurricane evacuation, Monroe County shall implement the procedures contained in the Monroe County Hurricane Preparedness Evacuation and Shelter Plan for modifying normal bridge openings including coordination with the U. S. Coast Guard and Florida Department of Transportation. [9J-5.012(3)(c)4]

**Policy 216.1.14**

By January 4, 1998, Monroe County shall complete a Post-Disaster Recovery Plan which will include a structured procedure aimed at debris removal preparedness during hurricane evacuation and re-entry (see Objective 217.2 and related policies). [9J-5.012(3)(c)4]

**Policy 216.1.15**

Monroe County shall consider implementing impact fees to offset the public costs of hazard mitigation, evacuation, reconstruction of public facilities, emergency communications equipment and similar needs. [9J-5.012(3)(c)4]

**Policy 216.1.16**

Monroe County shall coordinate with the Florida Department of Transportation (FDOT) to ensure that US 1 roadway capacity improvements necessary to maintain hurricane evacuation clearance time at 24 hours, including but not limited to improvements to US 1 between MM 80 and MM 90, are completed. See Traffic Circulation Policy 301.7.3. [9J-5.012(3)(c)4]

**Policy 216.1.17**

By January 4, 1998, Monroe County shall develop programs to reduce the number of evacuating vehicles including, but not limited to programs to encourage ride-sharing and transit usage and, consistent with applicable law, evacuating vehicle registration requirements. [9J-5.012(3)(c)4]

**Policy 216.1.18**

Reduced evacuation clearance times which may result from adjustments to evacuation model variables, programs to reduce the number of evacuating vehicles or increased roadway facility capacity, shall not be used to increase development expectations beyond the growth allocations provided herein, except to the extent that a hurricane evacuation clearance time of 24 hours can be maintained. Any necessary reduction in hurricane clearance times shall be accomplished by a plan amendment within 180 days of the re-assessment.

**Objective 216.2**

By January 4, 1998, Monroe County shall implement a plan to correct existing and projected shelter deficiencies for Category 1 and 2 storms. [9J-5.012(3)(b)7]

**Policy 216.2.1**

By January 4, 1997, Monroe County shall determine the existing level of deficiency in number and location of shelter spaces for Category 1 and 2 storms according to the projected residential and transient population. Existing buildings shall also be identified that could serve as shelters along with actions needed to bring them up to American Red Cross and Emergency Management specified standards. By January 4, 1998, a plan of action for correcting deficiencies shall be presented for adoption by the BOCC. The plan shall be monitored and updated on an annual basis. [9J-5.012(3)(c)4]

**Policy 216.2.2**

All new public facility buildings suitable for emergency public habitation as determined by the Red Cross shall be required to meet accepted hurricane shelter standards for Category 1 and 2 hurricanes. By January 4, 1997, Monroe County shall develop a plan for establishing one Category 5 Emergency Operations Center (EOC), at a minimum, in each of the three EOC districts. The plan shall include identification of funding sources and coordination with appropriate agencies for construction to Category 5 standards. [9J-5.012(3)(c)4]

**Policy 216.2.3**

By January 4, 1998, Monroe County shall revise the Capital Improvements Program to include the necessary funding for construction of a minimum of one Category 5 EOC in each of the three EOC districts in accordance with Policy 216.2.2. [9J-5.012(3)(c)4]

**Objective 216.3**

By January 4, 1998, Monroe County shall develop and implement a plan providing sufficient approved shelter spaces outside Monroe County for all county residents who will require shelter from a Category 3 or greater hurricane. [9J-5.012(3)(b)7]

**Policy 216.3.1**

By January 4, 1997, Monroe County shall coordinate with the Department of Community Affairs' Division of Emergency Management, the South Florida Regional Planning Council, Dade County, the Red Cross and other appropriate agencies to identify sufficient approved shelter spaces outside of Monroe County for all county residents who will require shelter from a Category 3 or greater hurricane. Priority consideration shall be given to expansion of the currently designated shelter at Florida International University in order to consolidate Monroe County shelter spaces in one location. [9J-5.012(3)(c)4]

**Policy 216.3.2**

Immediately following plan adoption, Monroe County shall initiate an intergovernmental agreement with Dade County and other appropriate agencies (e.g., Board of Regents, American Red Cross) in an attempt to provide sufficient approved spaces outside of Monroe County for all county residents who will seek shelter from a Category 3 or greater hurricane. In particular Monroe County shall request that the Board of Regents identify sufficient shelter spaces based on professionally accepted standards, in the updated campus master plan for Florida International University to be prepared in 1992-93. [9J-5.012(3)(c)4]

**Policy 216.3.3**

Monroe County shall, at least every five years in conjunction with application of the updated transportation model required by Policy 216.1.5, update the results of the Monroe County Behavioral Analysis contained in the Lower Southeast Florida Hurricane Evacuation Study to determine the number of Monroe County residents who will require shelter outside of Monroe County during a Category 3 or greater hurricane . [9J-5.012(3)(c)4]

**Policy 216.3.4**

By January 4, 1998, Monroe County shall evaluate and confirm the space available at all identified shelters and determine an estimate of shelter deficiencies.

**GOAL 217**

Monroe County shall develop and implement a program of hazard mitigation and post-disaster redevelopment to increase public safety and reduce damages and public expenditures. [9J-5.012(3)(a); 9J-5.013(2)(a)]

**Objective 217.1**

Monroe County shall develop and implement a program of hazard mitigation in the Coastal High Hazard Area (CHHA) which reduces floodplain alteration and damage or loss due to natural disasters. [9J-5.012(3)(b)8]

**Policy 217.1.1**

Monroe County shall define the CHHA as the area subject to inundation by the SLOSH (Sea, Lake and Overland Surges from Hurricanes) associated with a Category 1 storm. The CHHA shall be incorporated into the county Geographic Information System for use in managing future land use. [9J-5.012(3)(c)7]

**Policy 217.1.2**

Monroe County shall require that all new or replacement sanitary sewage systems in the CHHA meet the following requirements:

- a) All new or replacement sanitary sewage systems shall be designed and constructed to minimize or eliminate infiltration of floodwaters into the system and discharge from the system into floodwaters. Joints between

sewer drain components shall be sealed with caulking, plastic or rubber gaskets, and all manhole covers shall be sealed in a similar manner.

- b) All new or replacement sanitary sewage systems shall be located and constructed to minimize or eliminate damage to them and contamination from them during flooding. [9J-5.012(3)(c)3]

**Policy 217.1.3**

Monroe County shall coordinate with the Florida Keys Aqueduct Authority (FKAA) in the continued development of an Aquifer Storage Recovery System to supply emergency potable water in the event that the transmission lines from the mainland are disrupted during a natural disaster (see Potable Water Objective 701.6 and related policies). The FKAA shall continue to provide emergency service during electric power outages and hurricanes (see Potable Water Objective 701.7 and Policy 701.7.1). Monroe County endorses burying the potable water transmission lines to reduce their exposure to natural disasters where economically feasible. [9J-5.012(3)(c)3]

**Policy 217.1.4**

Monroe County shall continue its policy of reviewing the current Building Code and, as appropriate, adopting structural standards and site alteration restrictions that meet or exceed the minimum FEMA requirements. The Building Code shall be reviewed and revised at least every five years. The recommendations of the applicable interagency hazard mitigation report shall be considered in revisions to the Code. [9J-5.012(3)(c)3]

**Policy 217.1.5**

Monroe County shall continue to participate in the National Flood Insurance Program (NFIP) Community Rating System (CRS) to the maximum extent possible and shall seek to improve its current CRS Class 9 rating. [9J-5.012(3)(c)3]

**Policy 217.1.6**

Monroe County shall continue to enforce federal, state and local setback and elevation requirements to promote the protection and safety of life and property. Revisions to the existing setback requirements contained in the Land Development Regulations shall be considered as a means of reducing property damage caused by storms. [9J-5.012(3)(c)3]

**Policy 217.1.7**

Monroe County shall consider floodplain management and CHHA issues in making public acquisition decisions. [9J-5.012(3)(c)3]

**Objective 217.2**

By January 4, 1998, Monroe County shall develop a Post-Disaster Redevelopment Plan which addresses priorities for immediate recovery and long-term redevelopment including reducing the exposure of human life to natural hazards. [9J-5.012(3)(b)8]

**Policy 217.2.1**

As provided by its Hurricane Preparedness Evacuation and Shelter Plan, Monroe County shall annually coordinate post-disaster recovery operations to clarify the roles and responsibilities of county departments, state and federal agencies, private and public



utilities, and other applicable entities. Deficiencies shall be identified and Monroe County shall immediately initiate interlocal agreements or interdepartmental directives as necessary to remedy the existing deficiencies. [9J-5.012(3)(c)5]

**Policy 217.2.2**

By January 4, 1998, Monroe County shall develop a Post-Disaster Redevelopment Plan which specifies procedures for implementing programs for immediate repair, replacement, and cleanup, and long-term rebuilding and redevelopment. The plan shall also include procedures for the identification of damaged infrastructure and consideration of alternatives to its repair or replacement in the CHHA. Monroe County will review and evaluate policies contained in Post Disaster Redevelopment Planning: Model Plan for Three Florida Scenarios as it prepares its Post Disaster Redevelopment Plan. [9J-5.012(3)(c)5 and 7]

**Policy 217.2.3**

The Post-Disaster Redevelopment Plan shall identify areas particularly susceptible to damage within the CHHA such as the FEMA designated V-zones and repetitive loss areas as defined by FEMA and shall specify procedures for relocating or replacing public infrastructure away from them, where feasible. [9J-5.012(3)(c)7]

**Policy 217.2.4**

Monroe County shall limit redevelopment in areas within the CHHA particularly susceptible to repeated damage as defined by the Post-Disaster Redevelopment Plan. [9J-5.012(3)(c)5]

**Policy 217.2.5**

In accordance with Land Use Element Objective 101.7, Monroe County shall identify areas in need of redevelopment and shall draft a redevelopment plan for each area as well as procedures for implementing the program upon damage or loss due to a natural disaster. [9J-5.012(3)(c)6]

**Policy 217.2.6**

In no event shall emergency declarations before, during or following hurricane disaster negate the requirements of these policies and goals, or any regulations derived from them except following a public health menace declaration.

**Policy 217.2.7**

Following completion of the Post-Disaster Redevelopment Plan, guidelines contained therein for development after a natural disaster shall be incorporated within the Comprehensive Plan by plan amendment. Such amendment shall be processed at the next available plan amendment cycle following completion of the redevelopment plan.

**Objective 217.3**

By January 4, 1997, Monroe County shall adopt Land Development Regulations which direct future growth away from the Coastal High Hazard Area (CHHA). [9J-5.012(3)(b)6]

**Policy 217.3.1**

The Permit Allocation and Point System shall assign a negative point rating to developments proposed within the CHHA (see Policy 101.5.4). (See Future Land Use Element Objectives 101.2, 101.3, and 101.5 and related policies.) [9J-5.012(3)(c)3]

**Policy 217.3.2**

Monroe County shall prohibit the construction of mobile homes within the CHHA except on an approved lot within an existing mobile home park or subdivision zoned for such use as of the effective date of this plan. [5.012(3)(c)3]

**Objective 217.4**

With the following exceptions, public expenditures within the CHHA shall be limited to the restoration or enhancement of natural resources and parklands, expenditures required to serve existing development such as the maintenance or repair of existing infrastructure, and expenditures necessary for public health and safety:

1. public expenditures within the CHHA may be permitted where required to meet adopted level of service standards or to maintain or reduce hurricane evacuation clearance times and where no feasible alternatives to siting the required facilities within the CHHA exist.
2. public expenditures within the CHHA may be permitted for improvements and expansions to existing public facilities, which improvements or expansions are designed to minimize risk of damage from flooding. [9J-5.012(3)(b)5]

**Policy 217.4.1**

By January 4, 1997, Monroe County shall adopt Land Development Regulations which limit public expenditures in the CHHA by requiring consideration of feasible siting and design alternatives for public facilities and infrastructure. [9J-5.012(3)(c)3]

**Policy 217.4.2**

No public expenditures shall be made for new or expanded facilities in areas designated as units of the Coastal Barrier Resources System, undisturbed saltmarsh and buttonwood wetlands, or offshore islands not currently accessible by road, with the exception of expenditures for conservation and parklands consistent with natural resource protection, and expenditures necessary for public health and safety. [9J-5.012(3)(c)1]

**GOAL 218**

Applicants for permits to construct a major development project in the Florida Keys shall make available to Monroe County adequate information to allow ready determination of the impacts of the proposed development on the natural resources, public facilities and services, and human environment of the Florida Keys. [9J-5.006(3)(a); 9J-5.012(3)(a); 9J-5.013(2)(a)]

**Objective 218.1**

By January 4, 1997, Monroe County shall adopt revisions to the Land Development Regulations which shall require an Environmental Impact Assessment (EIA) for all major development projects. [9J-5.006(2)(b)1,3,4 and 8; 9J-5.012(3)(b)1 and 4; 9J-5.013(2)(b)1 to 4]

**Policy 218.1.1**

Guidelines shall be incorporated into the Land Development Regulations specifying the form and content of EIAs.

At a minimum, an EIA shall contain the following:

1. description of the proposed development action;
2. description of existing site conditions;
3. analysis of impacts of the proposed development, on the following:
  - a) soils;
  - b) wetlands;
  - c) native upland vegetation;
  - d) wildlife habitat;
  - e) rare and endangered plant and animal species;
  - f) water quality;
  - g) living marine resources;
  - h) air quality;
  - i) drainage;
  - j) water supply;
  - k) wastewater treatment and disposal;
  - l) solid waste disposal;
  - m) transportation;
  - n) housing;
  - o) historic and archaeological resources;
  - p) conservation lands;
  - q) community character;
  - r) economic impacts;
  - s) other special considerations as may be identified by the Department of Planning; and
4. measures designed to eliminate identified adverse impacts. [9J-5.012(3)(c)1]

**Policy 218.1.2**

Mitigation measures identified in the EIA shall be specified, where deemed appropriate by the County, as conditions of the Development Order. [9J-5.012(3)(c)1]

**Policy 218.1.3**

Prior to adoption, the EIA requirements shall be subject to review. To the extent possible, the reviewers shall include those individuals who participated in the development of the existing HEI methodology. [9J-5.012(3)(c)1]



